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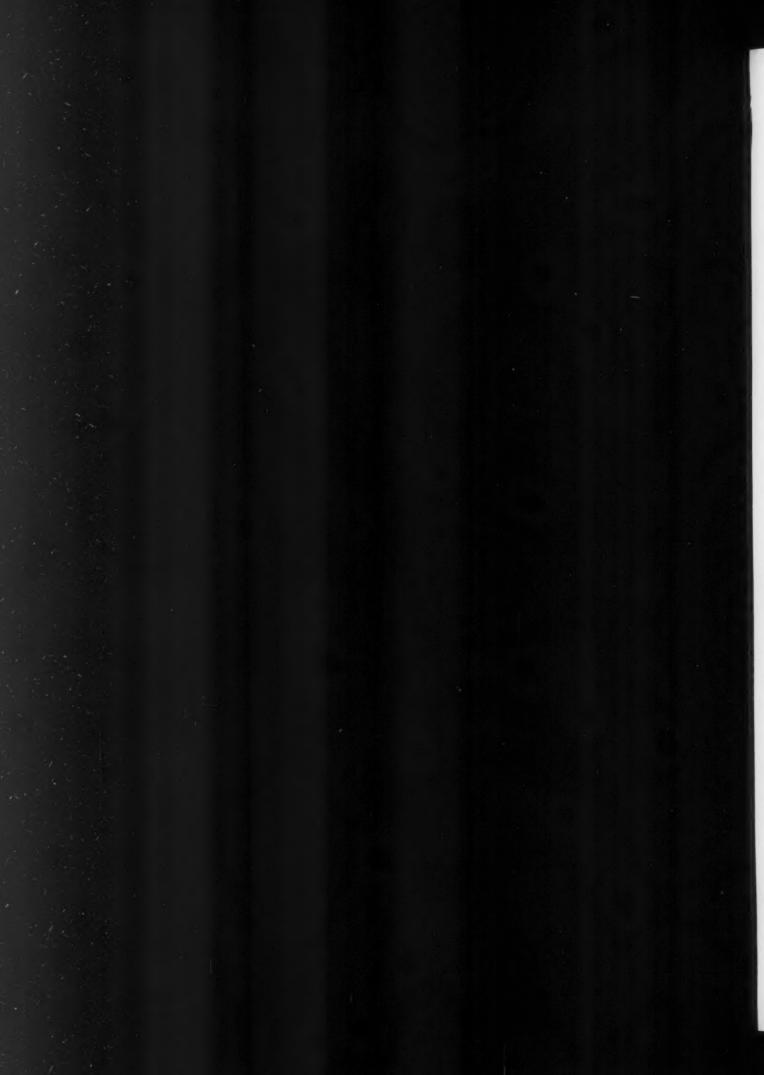
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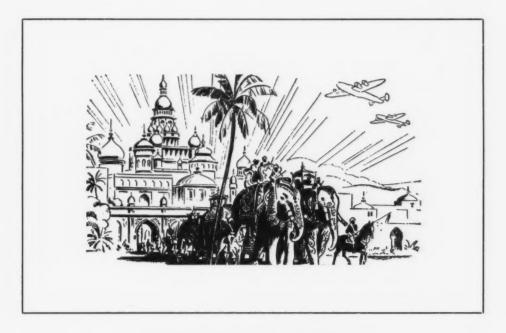
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E ditorial Comment

Unlimited Opportunity

There has been a lot of talk going around that opportunity in the cosmetic business is past. Is it? Let's see!

The Federal Trade Commission has just released a report showing that 113 firms hold 46 per cent of the manufacturing wealth of this country. According to this report, one firm, manufacturing linoleum, dominates that industry with 57.9 per cent of the assets.

Not given in the report is the reasonable thought that in certain fields investment in plant alone makes it impossible for an individual to begin operation. Take public utilities, as an example.

Many industries are dominated by three concerns. The tin can and other tin ware industry has three companies, according to the FTC, which hold 95.3 per cent of the business; linoleum, 92.1 per cent; copper, smelting and refining, 88.5 per cent; cigarettes, 77.6 per cent; distilled liquors, 72.4 per cent; plumbing equipment and supplies, 71.3: rubber tires and tubes, 70.3 per cent; office and store machines and devices, 69.5 per cent; automobiles, 68.7 per cent; biscuits and crackers, 67.7 per cent; agricultural machinery, 66.6 per cent; and meat products, 64 per cent.

Using the same unit of three, as applied to this entire industry, the three largest manufacturers of cosmetics in the country do less than 10 per cent of the total volume of business accounted for.

By comparison with other industries, the newcomer to this field doesn't need a fortune to get started, and his equipment requirements are elementary. What he must have, and in large supply, are energy, nerve and imagination. If he has these, the opportunity is unlimited.



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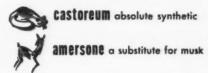
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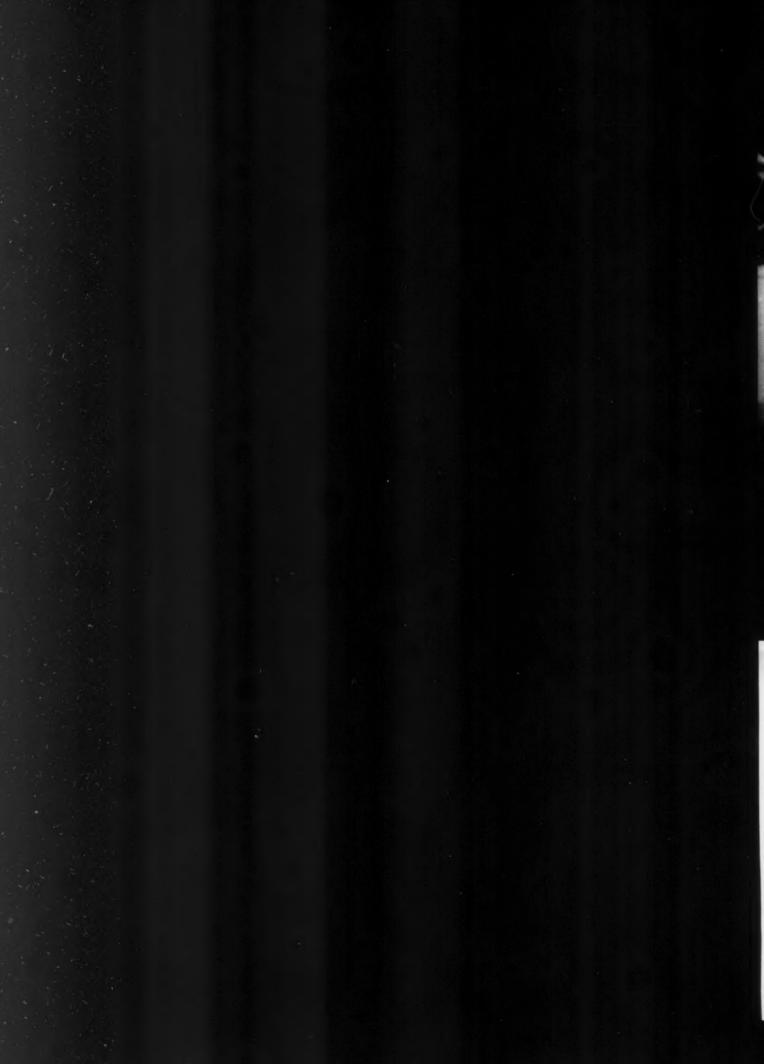
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AMERICAN PERFUMER

SEPTEMBER 1949

ISCO ABSORPTION BASES ANSWER COSMETIC PROBLEMS

FIVE ISCO ABSORPTION BASES

FIVE ISCO ABSORPTION BASES:

Each is designed for water in oil creams: Each is a neutral emulsifier, but every one is adjusted to give cosmetics different characteristics.

ISCO ABSORPTION BASE STANDARD: This base is recommended particularly for lubricating creams of medium price. When holding its full complement of water, the creams made with this base would have a slightly off-white color or what is generally known as a slight lanolin color. It imparts to creams a richness of texture but without greasiness. For night creams requiring large amounts of lanolin, this base is very effective.

ISCO ABSORPTION BASE STANDARD can be used in place of Lanolin, but there are some Cream manufacturers who will add a further 2 to 3% of lanolin in order to impart its color and odor to their cream. The bulk of all lubrication of the cream is supplied by this base. ISCO ABSORPTION BASE STANDARD will absorb up to 500% Water. It contains both free and combined cholesterol and isocholesterol esters. It will emulsify quickly and retain other mediums incorporated with it. Its use will effect some savings by eliminating the necessity for hardening waxes.

ISCO ABSORPTION BASE No. 256: Designed for night creams where nourishment of the skin is to be desired.

This particular base is recommended for use in the finest type of lubricating creams. It will be noticed that a cream made from it will spread easily on the skin and be absorbed quickly through the skin so that no film remains on the skin nor is there any indication of "drag" when applying it to the skin. A base of this type possesses what many consider to be the most desirable characteristics of a perfect cream. Even when this base is used by itself in conjunction with water, it will produce a cream having the following proper-

ties: silky smoothness, no drag whatso-

ISCO ABSORPTION BASE No. 734: This is intended principally for those creams which are to be recommended for dry skin.

ISCO ABSORPTION BASE No. 734 is similar to many Absorption Bases which are built on the use of cholesterol only, without Lanolin. It will absorb five times its weight of water producing light bodied and white creams.

This base is intended principally for semigreasy creams which leave no noticeable residue on the skin. Such creams, of course, can be used for lubricating, as well as for an undercoating for face powder. This base will work best with water only, but this does not preclude the addition of many cosmetic materials, when specific effects are desired. A small quantity of this base added to any cold or liquifying cream will enrich that cream with cholesterol. Another important use for this base is to be found in the manufacture of stable pharmaceutical ointments containing a varied list of medicants dissolved in either the water or the oily phase.

ISCO ABSORPTION BASE No. 326 has been found to be invaluable to manufacturers of hand lotion. The production of this type of cosmetic presented difficulties to compounders years ago. However, since the introduction of this base, millions of bottles of hand lotion have been successfully marketed during the past ten years. We know that a trial will prove our contention.

ISCO ABSORPTION BASE No. 2691 is the solution to the difficult problem of liquid water in oil cream. It is no effort to obtain a stable liquid emulsion for cold, cleansing, or lubricating creams with this new base. Hair dressings have also been easily formulated with Base #2691.

Write for further details.

L ANOLIN has been used for hundreds of years because of its ability to absorb water and because of the many other desirable characteristics of this material. Both the cosmetic and pharmaceutical industries have always considered lanolin to be a valuable and beneficial ingredient in creams and salves.

ISCO ABSORPTION BASE contains in large proportion the desirable characteristics of lanolin and none of its undesirable features. ISCO ABSORPTION BASE is built upon the valuable ingredients of lanolin, but does not have the objectionable odor and the heavy tenacity of lanolin. Lanolin will absorb only twice its weight of water, yet ISCO ABSORPTION BASE will absorb five times its weight and hold it in an emulsion.

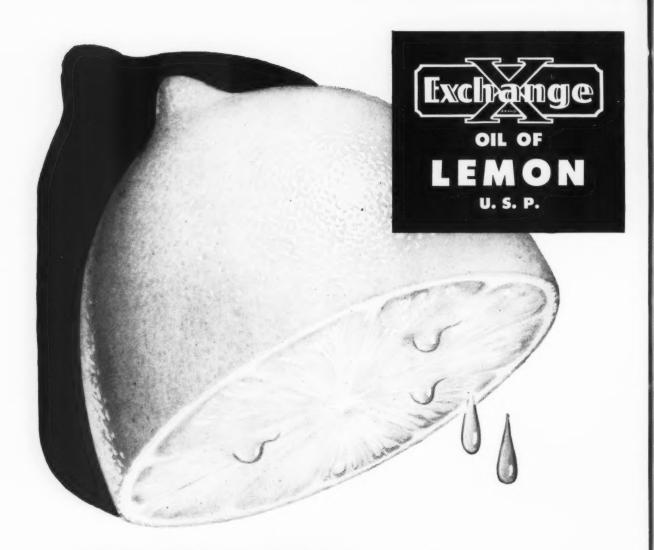
ISCO ABSORPTION BASE is chemically pure and is absolutely neutral. It will not oxidize or turn rancid, and will prevent in some measure the oxidation and rancidity of the ingredients mixed with it. ISCO ABSORPTION BASE is a combination of the free, valuable alcohols of the oxycholesterol and isocholesterol groups. Practically all cosmetic manufacturers are well acquainted with the value of cholesterol as it has always been known that cholesterol is to be found in any healthy skin, and, as a consequence, any addition of cholesterol to the skin is quite naturally of benefit.

ISCO ABSORPTION BASE is stable to acids and alkalies. It will melt at body temperatures, and when in combination with other ingredients, it will act as a soothing cream, and acts also as a lubricant and emollient. It imparts a beautiful lustre to every cream. In order to obtain homogeneous and stable emulsions of cream with ISCO ABSORPTION BASE, a simple procedure is necessary.

ISCO ABSORPTION BASE has many uses in addition to its value as an ingredient of all types of cosmetic creams. It acts as a color diffusing agent in lipstick. It can also be used in a variety of pharmaceutical ointments and salves, as well as in lotions.

This general description of our group of ABSORPTION BASES describes in particular ISCO ABSORPTION BASE STANDARD. We have several other absorption bases which are somewhat different and made for specific needs. They are all based on the valuable alcohols found in lanolin, but each has been built with a specific cosmetic need in mind.

ISCO ABSORPTION BASE can be altered in order to make different types of creams and lotions.



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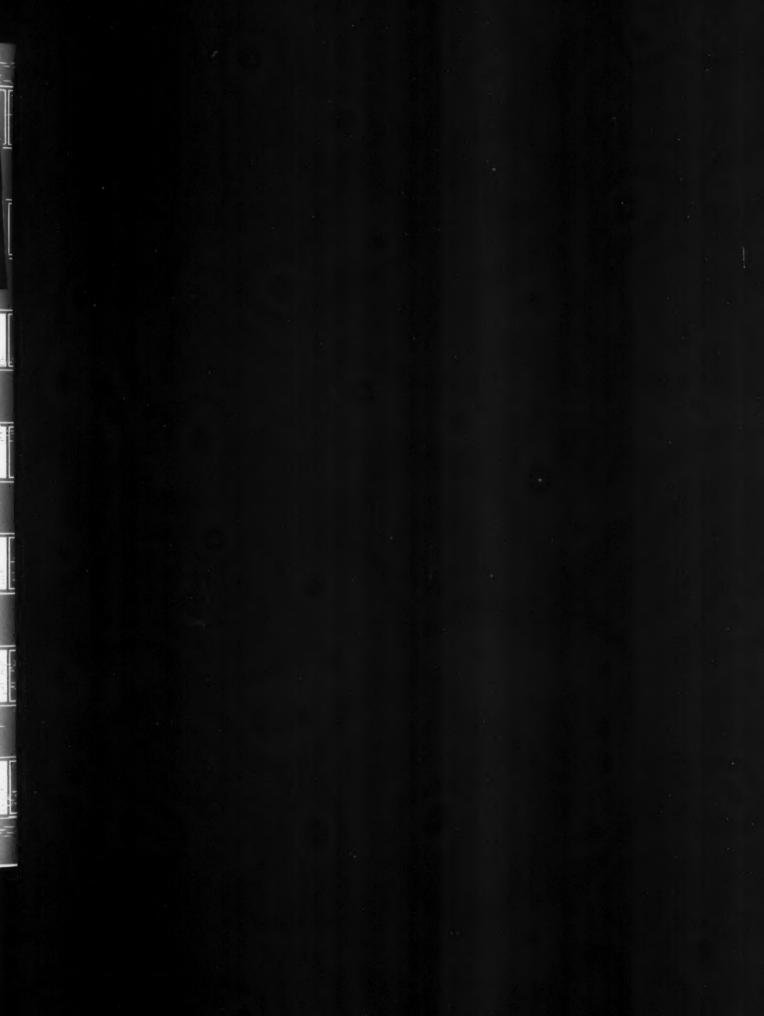
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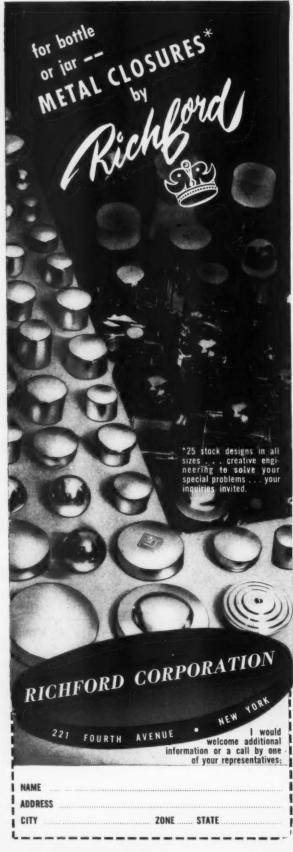
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Formula No. 1 shows how Atlas emulsifiers make possible a cream in which lemon juice, dilute citric acid or other mild acids can be incorporated. Since Atlas emulsifiers are compatible with mildly acidic materials, such acids may be added to this formula (replacing a like amount of water) to match the pH of the skin, completely avoiding any tendency to skin sensitization due to alkalies.

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FORMULA NO. 1-O/W VANISHING CREAM

	MACENTAL TO THE STATE OF THE ST
	Stearic Acid (triple pressed) 10.0% Arlacel 60 (Atlas emulsifier) 5.2% Arlacel 80 (Atlas emulsifier) 1.0%
$A \leftarrow$	Arlacel 60 (Atlas emulsifier) 5.2%
	Arlacel 80 (Atlas emulsifier) 1.0%
	Tween 60 (Atlas emulsifier) 2.8%
В	Water 81.0%
	\begin{cases} \text{Water 81.0%} \\ \text{Preservative q.s.} \end{cases}
\boldsymbol{C}	Perfume q.s.
	Preparation: Add (A) at 80° C., to (B) at 85° C., with rapid stirring. Perfume at 50° C. Pour at 45° C.

FORMULA NO. 2-O/W VANISHING CREAM

4	Stearic Acid (triple pressed) 15.0% Isopropyl palmitate 2.0%
48	Isopropyl palmitate 2.0%
	Potassium Hydroxide 1.0%
В	Sorbo (Atlas D-sorbitol solution) 18.3%
	Water 63.7%
	Preservative q.s.
C	Perfume q.s.
	Preparation: Heat (A) to 80° C. Heat (B) to 82° C. Add (B) to (A) slowly under continuous agitation. Continue agitation to 45°-50° C. Perfume and package.



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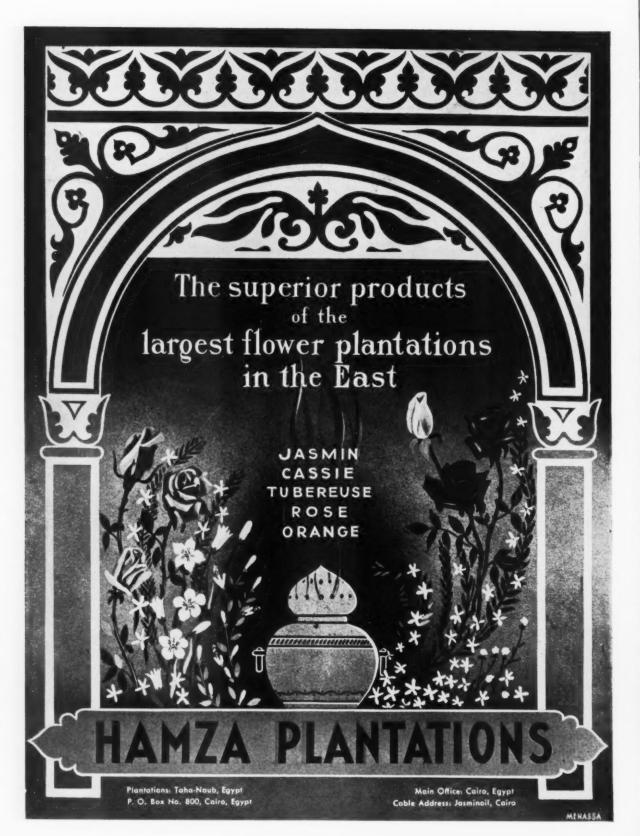
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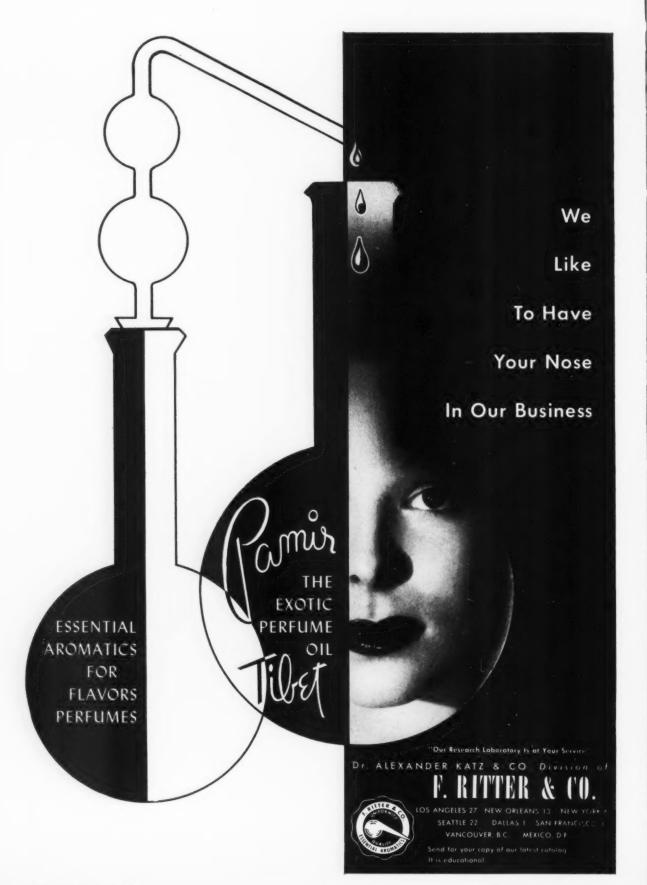
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Besiderata by MAISON G. DENAVARRE

FIJI ISLAND PROBLEMS

A recent article by Foy in the "Merck Report," describing pharmacy in the Fiji Islands, develops a number of points of interest to the cosmetic industry.

Prickly heat is common among newcomers and as a result the sale of all sorts of powders and lotions for treating it is immense. Asthma is rampant and probably with it goes a large incidence of allergy.

The temperature usually runs between 76 and 86 deg. F., but the wet months create very destructive conditions. So called "tin containers" rust rapidly while crude drugs and similar materials mold readily. Compressed tablets discolor on standing and toothpaste tubes deteriorate and leak. Nothing is said of shaving cream, but this probably does the same thing.

The native population are large users of talc, perfumed brilliantine, soap and toothpaste, which is usually sold in small dingy native shops. The better stores carry well known trade marked lines, the customers for which are visiting tourists. These few ideas may help a potential exporter to the Fiji Islands in designing his line to meet local needs.

HORMONE SCALP EFFECTS

Work by Reiss and Gellis, J. Investigative Dermatology, 12, 159, 1949, reports the results of experiments on rabbits following the application of estrogen and androgens to the skin by inunction in a shaved area of the abdomen in each animal. The ointments contained alpha estradiol 0.15 mg, per gram of ointment and 2 mg, of methyl testo-

sterone per gram of ointment respectively. The authors conclude that the estrogen reduces the size of the sebaceous gland, stimulating the hair papilae with an increase in the rate of hair growth. The androgen reduced the activity and decreased the rate of hair growth. The estrogen affected the cortex of the adrenal gland as did the androgen, but the latter to a much lesser extent.

It is true that the concentration of the ointments used was quite high by cosmetic standards and also that results on rabbits may not be translatable in human terms, but at the same time, this work sheds new light on the effect of hormones on the sebaceous glands and rate of hair growth.

RUG CLEANERS

Essentially speaking, a rug cleaner or shampoo is much the same as shampoo for human hair. It has to be just as effective and safe as if a person were using it.

In the older days soap of the cocoanut oil type, similar to cocoanut oil shampoo, was the material used. but was found undesirable because in certain regions it left hard water residue, thus affecting both the finish and the tendency to catch dirt, causing it to stick to the fibers. More recently a number of synthetic detergents have found rather wide application in rug shampoo. The alkyl aryl sulfonates, made by three or four of the leading companies and the sodium alkyl sulfates are found to be particularly effective. Generally speaking, rug shampoos contain from 2 to 5 per cent of surface active agents, occasionally enhanced with sodium metasilicate and sodium ses-



M. G. DeNavarre at work in his laboratory

quicarbonate. The latter is used with the alkyl sulfates, whereas the silicate appears to work better with the alkyl aryl sulfonates. Equal weights of detergent and builder are often used.

ANTIPERSPIRANTS

A recent FTC order against one manufacturer of antiperspirants bans the use of the unqualified words, such as "safe" or "harmless." The order further requires statements of activity to be limited to "temporary effect."

Anytime one sees such words as "safe" or "harmless," they immediately conjure in one's mind complete safety in every respect. Of course such safety presumably exists in heaven, but we all know it does not exist on earth. As this column has mentioned previously, NOTH-ING is completely safe, including drinking water, for under certain circumstances, people have been known to die (drown) in water. Therefore, when words as far sweeping in their meaning as "safe" or "harmless" are used, they certainly should be qualified to designate that they are safe under special circumstances, depending upon the product described. Safe applied to drinking water means one thing, but when applied to an antiperspirant or cleansing cream or a depilatory or a hair waving lotion, it has an entirely different meaning because the



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safety is relative. It is the relativity that must qualify the word in use.

As far as effectiveness is concerned, we all know that the effect of an antiperspirant is transient—fortunately. If it were not, serious consequences could result. In fact, when one does find materials whose antiperspirant properties are longer lasting then those obtained from the average antiperspirant sold on the market, there is a tendency towards skin irritation and actual harm.

That the effect of an antiperspirant varies from one individual to another is well known to all as is the fact that the effect varies in the same individual from day to day and from one area to another.

EXCHANGING IDEAS

For over ten years this column has periodically touched on the real and moral values of exchanging ideas in the industry. In one of the trade publications the following quotation recently appeared—"If two men each have a dollar and they exchange them, each man still has only one dollar and there is no progress. But, if two men each have an idea and they exchange them, each man then has two ideas, and often they multiply rapidly. Exchanging ideas is a keynote of progress in every field of human activity."

It was this kind of thing that motivated the formation of the Society of Cosmetic Chemists wherein one could find a forum for discussing any controversial subject and where the individual chemists could meet and discuss with each other their individual problems and ideas. Some manufacturers may feel that they do not care to have their chemists do this sort of thing because they want their plant secrets to stay inside the plant.

If a secret is really unusual and worthwhile, it should be patented. If it is strictly a "sort of a secret formula or process" then a manufacturer need not worry about his chemist, for it is common experience that cosmetic chemists are pretty careful about discussing their private company business.

So, let's have more exchanging of ideas. We did during the war when we were all facing a common problem. Only by the generous exchange of ideas at that time did we win.

QUESTIONS AND ANSWERS

764. SUNTAN CREAM

Q: We should like to have your opinion on a suntan cream that we are manufacturing. The formula is the following. (Formula Given). Although the emulsifier is excellent under many respects, we find that in the long run, it has a tendency to darken the cream. Could you suggest another emulsifier, giving the percentage to be used, which is compatible with our formula?

G.A.-ENGLAND

A: You will find that your discoloration may be reduced to a minimum if you form the triethanolamine stearate in the emulsion and not make it in advance. Part of your discoloration may be due to traces of iron or copper from your equipment. Only glass lined or stainless steel equipment should be used for such a product. There is no point in adding the magnesium sulfate in your emulsion. If anything, it may make it unstable. Salol will discolor slowly, particularly in an alkaline cream. To overcome this, your cream should be colored in advance with a water or oil soluble tan color. If you will make your triethanolamine stearate by melting together 270 parts of stearic acid with approximately 140 parts of triethanolamine in that ratio, forming the soap during emulsification by putting the stearic acid in with the fats and the triethanolamine with the water, you will find that you get a very stable light colored product.

765. LEG MAKE-UP

Q: I would appreciate a formula or formulas for making a leg makeup preparation. Are there any types that are not suspended solutions? By that I mean would it be possible to prepare a soluble solution that would dry like a paint but wash off readily and not be harmful?

G.S.-Massachusetts

A: We would suggest that you use a combination of certified colors

that will give you the desired stain. As an example of this type of formulation, there is mentioned in "The Chemistry and Manufacture of Cosmetics" a combination of yellow, red and blue dyestuffs that have solubility, stability and light fastness. You might work with FD & C Red #1, Yellow #1 and Blue #1, adjusting the amounts of each to give you the particular type of shade you want.

766. SOLIDIFIED COLOGNE

Q: I would appreciate very much information concerning the formulation of a stick cologne which will not break down or melt during the summer months. I would like to know which waxes are most suitable for this purpose. How about one of the carbowax group?

C.S.-NEW YORK

A: A stick cologne is formulated from a greaseless base. Such a greaseless base will consist essentially of 10 per cent of hard soap in denatured alcohol, dissolved with the aid of heat. Perfume is added just before the material begins to cloud, when it is poured into molds. Speed with which the material is chilled during the molding process affects its physical appearance. Since you want the least possible residue on the skin, it is doubtful if the carbowax substances would benefit the stick but you might try including them with your hard soap.

767. HAIR TONIC

Q: I manufacture a hair tonic that has glycerin in its contents. The alcoholic content of my tonic is 25 per cent. I would like to add lanolin and polyethylene glycols to my tonic. Will these two blend with my formula?

F.S.T.-VIRGINIA

A: Try one of the hydro-alcoholic soluble lanolins, supplier of which is named in a separate letter. Untreated lanolin woud not dissolve. The polyethylene glycol can be added if desired, but may be superfluous in this formula. Try it.



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208 September, 1949

The American Perfumer

Coriander Yield and Quality

Coriander seed from seventeen different sources was grown comparatively to ascertain which was the better type for the spice trade and which for the production of the essential oil.

M. S. LOWMAN, * NORRIS W. GILBERT, † AND J. W. KELLY *

THE dried ripe fruit, generally referred to as seeds, of Coriandrum sativum L. is widely used as a spice for flavoring many food products. The essential oil distilled from the seed with steam is extensively used in perfumery and for flavoring alcoholic beverages. The plant is an annual, native of Southern Europe, Asia Minor and the Caucasus where the flavoring qualities of its seed have been known and made use of since ancient times. The main countries of commercial production have been Soviet Russia, Hungary, Poland, Rumania, Czechoslovakia, and Morocco. Russia and Hungary are the principal producers of the essential oil. In the years just preceding the recent war the United States imported on the average about 2,000,000 pounds of seed

Small lots of seed from various sources received by the U.S. Department of Agriculture from time to time have been grown over a period of years for observations regarding plant types, growth and fruiting habits. From these small plantings of seed from many sources it has been found that there are two distinct types of plants. One is an early maturing, short bushy type with a rather definite determinate flowering period. The other is a later maturing, taller and less branching type with the flowering and fruiting periods overlapping so that the plants contain both fruit and flowers at various stages of maturity at the same time. There is considerable variation in growth, production and quality of fruit within these types. The early maturing type produces seed of

more desirable appearance to the spice trade from the standpoint of uniformity of size and color. The seed of the later maturing type, while less desirable in appearance, is much richer in essential oil. This accounts for the fact that Russia and Hungary, where the latter type is grown, are the principal producers of the essential oil.

Attempts have been made to grow coriander in several localities in the Eastern part of the United States but little information regarding the success of these attempts is available. Conditions in the Imperial Valley of Southern California, where all crops are produced under irrigation, have been found to be quite favorable to growth and seed production when plantings are made in the Fall and the seed crop harvested in Spring before the very hot weather begins. Growers in the Eastern localities, apparently, have found growing conditions more favorable to the later maturing varieties while only the early maturing ones have been found to make normal growth in the Imperial Valley.

The production and quality of the seed is, apparently, greatly affected by environmental conditions as indicated by the essential oil content of seed from different countries.

A report by Ivanov,1 Grigoriva and Ermakov, on the content of essential oil during the process of maturation and germination of coriander seed in Russia in 1928 and 1929 showed that variety and geographical location affected the quality of the seed grown in that country. Russian seed contained 0.8 to 1.0 per cent, French 0.4 per cent, Italian 0.5 per cent, Moroccan 0.2 to 0.3 per cent and East Indian 0.15 to 0.2 per cent of essential oil when grown in the same locality. Seed from two of these

Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural escarch Administration, U.S. Department of Agriculture.

* Division of Tobacco, Medicinal, and Special Crops.

† Formerly of Division of Soils, Fertilizers and Irrigation.

TABLE 1

Results of cultural tests of coriander at Beltsville, Maryland using seed from various sources

		Seed			1943				1944				1946		
Typ and lot N	d .	Origin	Domestic Source	Days from seeding to maturity	Plant height	Seed per acre1	Oil In	Days from seeding to maturity		Seed per acre2	Oil in	Days from seeding to maturity	Plant height	Seed per acre2	Oil in
					Inches	Pounds	Percent		Inches	Pounds	Percent		Inches	Pounds	Percent
Early	1	Morocco	Open market	81	12	519	0.36	82	12	615	0.31	72	20	830	0.18
	2	Morocco	Open market	81	14	227	.30	82	12	600	.29			000	0.10
	5	Mexico	Bard 1943					82	16	959	.31	78	18	585	.33
	6	Iran	Beltsville 1941	81	18	624	.31	86	16	781	.23			565	.00
	7	Brazil	Beltsville 1941	86	24	1053	.50	86	20	958	.35	78	30	823	.35
	9	Iran	Beltsville 1941	77	20	387	.21	82	12	585	.16			020	.00
	11	Iran	Beltsville 1941	81	22	390	.25	86	20	640	.26				
	12	Unknown	Imperial Valley—1943									78	20	769	0.5
	13	Morocco	Open market					86	20	827	.30	, 0	20	707	.25
	14	Baluchistan	Beltsville 1941	81	12	212	.33		~ ~	027	.00				
	15	Iran	Beltsville 1941	77	16	345	.28								
	16	Iran	Beltsville 1941	77	12	302	.29								
Late	3	Russia	Kentucky 1942					92	32	1074	.90	104	36	646	.76
	4	Russia	Kentucky 1942					96	32	943	.80	104	36	742	.78
	8	Unknown	Beltsville 1941	98	24	694	.61	98	32	959	.72				
	10	Unknown	Beltsville 1941	100	28	613	.65	94	32	831	.78				
	17	Iran	Beltsville 1941	98	28	196	.37								

Yields calculated from unreplicated plots.
 Yields calculated from replicated plots.

sources when grown in eight localities in the U.S.S.R. were reported to produce seed varying in oil content from 0.81 to 1.02 per cent when immature and 0.70 to 1.00 per cent when mature in the case of one variety, and 0.28 to 0.49 per cent when immature and 0.28 to 0.33 per cent when mature in the case of the other. Field and shade drying at different stages of maturity was reported to influence the oil content of the seed but the quality of the oil was not significantly different as a result of growth or curing treatments.

Willkie and Kolachov2 examined seed grown in Kentucky and Ohio in 1940 and found it to be of good quality. They reported the Russian or late maturing type grown in Kentucky was harvested at three stages of maturity and the seed from each stage distilled to determine the effect on oil content. The oil content of seed in the unripe stage was reported to be 1.20 per cent and in the ripe and overripe stages 1.00 per cent and 0.88 per cent respectively, and yields of about 1100 pounds of seed were obtained per acre. They further reported that experimental plantings of Moroccan, Hungarian and Russian seed made in Ohio produced seed of 0.25 per cent, 0.90 per cent and 1.00 per cent of essential oil, respectively. According to Katz,3 seed grown experimentally in East Central Texas in 1941-42 gave an excellent quality of oil on steam distillation. He concludes that the climatic conditions of this section of Texas appear to be conducive to the production of seed of good quality.

Because of the shortage of spices from foreign sources during and following the late world war considerable interest has developed in the culture of coriander as a domestic crop. An investigation of the possibilities of the crop in this country was, therefore, thought desirable. The present paper reports on the work that has been done at Beltsville, Maryland, and Bard, Imperial County, California, on some phases of such an investigation

METHODS AND RESULTS

Inasmuch as the flavoring qualities of the seed for use as a spice depends primarily on the amount of oil pres-

ent, all lots of seed obtained in these experiments were evaluated by determining their essential oil content. Since the complete removal of the essential oil by steam distillation of the ground seed as described in the Official and Tentative Methods of Analysis of the A.O.A.C., 6th edition, 1935, page 540, is difficult, and the results on the same seed lots are not always in good agreement, an alternative method was used on the seed from the 1946 and 1947 season's crops. In this method 200 grams of finely ground seed are completely extracted with petroleum ether. From the filtered extract, which contains the fixed and volatile oils, the solvent is removed by heating on a steam bath, the last traces under reduced pressure. To the extract freed of solvent, 200 ml. of water is added in a 750 ml. Erlenmeyer flask and the volatile oil distilled off by rapid boiling over direct heat. The oil is collected by means of the volatile oil trap used in the A.O.A.C. method. Both the fixed and volatile oils present may be determined by this method. Repeated trials gave more consistent results than could be obtained with the direct distillation of the ground seed as in the A.O.A.C. method. The results shown in Table III on both Beltsville and Bard grown seed give a comparison of the two methods.

Ten lots of seed from as many sources were sown at Beltsville, Maryland on May 22, 1941 in single plots for observation and for seed increase to be used for later cultural tests. The seed was drilled to a depth of about one-half to three-fourths of an inch with a small single row garden seed drill at such a rate as to produce a stand of 25 to 30 plants to the foot. Seven of the 10 lots sown produced bushy plants 12 to 16 inches high that matured during the period July 20 to August 15. Seed of five of these seven lots came from Iran and one each from Baluchistan of the Southern Caucasus and Brazil, S.A. The remaining three lots which came from Iran, Turkey and an undetermined domestic source, produced plants that in each case grew to a height of 20 to 30 inches and flowered from the middle of July until the fruit began to mature early in September. The oil content of seed obtained from these 10 lots was not deter-

TABLE II

Results of cultural tests of coriander at Bard. California using seed from various sources

Seed				1	943-44			7	944-45			1945-46								
Tys an lot f	d	Origin	Domestic Source	Days from seeding to maturity	Plant height	Seed per acre1	Oil in seed	Days from seeding to maturity	Plant height	Seed per acre2	Oil in	Days from seeding to maturity	Plant height	Seed per acre1	Oil in seed					
					Inches	Pounds	Percent		Inches	Pounds	Percent		Inches	Pounds	Percent					
Early	1	Morocco	Open market	188	26	2230	0.23					163	30	1216	0.27					
	2	Morocco	Open market	198	22	498	.26													
	5	Mexico	Bard-1943	198	30	2732	.25					167	31	1218	.25					
	6	Iran	Beltsville 1941	198	34	1380	.26													
	7	Brazil	Beltsville 1941	198	35	1870	.33	156	33	623	0.30	167	36	571	.25					
	9	Iran	Beltsville 1941	182		1684	.13													
	11	Iran	Beltsville 1941	198	33	2161	.26													
	12	Morocco	Imperial																	
			Valley—1943					149	28	927	.22	163	32	1177	.26					
Late	3	Russia	Kentucky 1942	215	42	1266	.61	179	36	17	.56	183	40	432	.59					
	4	Russia	Kentucky 1942	216	41	706	.59					183	39	541	.42					
	8	Unknown	Beltsville 1941	220	40	240	.44													
	10	Unknown	Beltsville 1941	220	40	309	.53													

Yields calculated from replicated plots.
 Yields calculated from unreplicated plots.

mined but the seed was retained for further cultural tests.

In 1942 four plantings were made at Beltsville, Maryland, two with seed of the late maturing type obtained from the 1941 plantings and the other two with seed of the Moroccan type obtained from domestic dealers. The seed was sown on May 19 in light sandy loam soil in single plots of two 360-foot rows spaced 3 feet apart. The Moroccan varieties grew to a height of one foot and matured their seed early in August while the two late varieties were harvested early in September when the plants were bearing fruit in various stages of maturity.

In 1943 and 1944 more extensive comparative cultural tests were made using seed of all available varieties both at Beltsville, Maryland, and at the U. S. Yuma Field Station of the Division of Soils, Fertilizers and Irrigation at Bard, California. The 1943 plantings at Beltsville were made with seed of twelve lots as indicated in Table I. The seed was drilled on May 7 in rows 30 inches apart at the rate of 30 to 40 seed to the foot in

unreplicated plots consisting of four to eight 25-foot rows. Stands of 25 to 30 plants to the foot were obtained in all plots. The plants from the several seed lots differed considerably with respect to their height, the time required for them to mature and the yield and oil content of the seed obtained. Only three of the seed lots, namely Nos. 8, 10, and 17, produced plants of the late maturing type which require 12 to 14 more days to mature than the other type. Seed of the two lots of unknown origin contained over 0.60 per cent of essential oil while the seed of the one originating in Iran contained only 0.37 per cent.

The planting at Beltsville in the 1944 season included seed from eight of the most promising lots grown in 1943 with four additions as shown in Table I. The 12 lots were planted on May 6 in 40-foot plots of four rows each spaced 30 inches apart and replicated four times. The two center rows only of each plot were harvested for yield data. Seed of 11 of these lots (see Table II) was planted at Bard on November 11, 1943, and the seed



Coriander plots at Beltsville, Md. Left, late maturing type No. 3 in flower. Right, early maturing type No. 6 in fruit.

TABLE III

Percentage of essential oil in coriander seed grown at Beltsville, Md. and Bard, Calif. in 1946 as determined by two methods of assay.

	Se	red	Beltsv	ille, Md.	Bard, Calif.						
Type o	and		Me	thods	Methods						
lot N	0.	Origin	A.A.A.C.	Alternative	A.O.A.C.	Alternative					
Early	1	Morocco	0.17	0.18	0.26	0.27					
	5	Mexico	.29	.33	.22	.25					
	7	Brazil	.35	.35	.18	.25					
	12	Imp. Valley	.18	.25	.20	.26					
Late	3	Russia	.62	.76	.41	.59					
	4	Russia	.61	.78	.40	.42					

harvested in the Spring of 1944. These plantings consisted of 50-foot raised bed plots, 42 inches from center to center containing two rows spaced 22 inches apart and replicated eight times.

Excellent stands were obtained from all seed lots at Beltsville. The calculated yields of seed per acre from lot Nos. 3, 4, 5, 7 and 8 were significantly higher than those from all other lots. At Bard the stands were so poor and lacking in uniformity that the plantings were duplicated on January 18, 1944. The resulting stands were little better than the earlier ones and maturity was so much delayed into the unfavorable Summer season that no data could be obtained on the results of this planting. The data for Bard in Table II for the 1943-44 season, therefore, represent the results of the first planting. The yield data were calculated on a perfect stand basis for comparative purposes and should not be considered as indicating actual yields obtainable under field conditions. The number of days from seeding to maturity were greatest for the later maturing or taller Russian types Nos. 3, 4, 8 and 10 as was the case at Beltsville. The five highest seed yields were obtained from lots Nos. 1, 5, 7, 9 and 11. From the results at the two locations it appears that under the conditions of the trials, lots 5 and 7, the Mexican and Brazilian varieties are superior for both localities from the standpoint of seed production. These are both early maturing varieties, the seed of which is low in essential oil but uniform in size and color, making them suitable for the spice trade. Lot No. 3, the late maturing Russian seed grown in Kentucky in 1942, gave the highest yield at Beltsville of all lots grown and at Bard it yielded highest of the four lots of the late

Five of the most promising varieties grown in 1944 from the standpoint of plant growth, yield and quality of seed were selected for further tests at Beltsville, in 1945. One additional lot was added, namely that designated as No. 12 in the plantings at Bard in 1944-45. This variety had been grown commercially in the Imperial Valley of California. These were planted in 40-foot plots of 2 rows each spaced 30 inches apart and replicated four times. Good stands were obtained in all cases and good yields were indicated until heavy rains began early in July during the flowering and fruiting period, causing damage by lodging and flooding to such an extent that the planting was discarded. In the meantime an unreplicated test was made at Bard during the 1944-45 season on the late maturing variety No. 3 and the two early maturing varieties, Brazilian No. 7 and the Imperial Valley grown No. 12. These were planted on December 18, 1944, in single 150-foot beds of 2 rows each spaced 14 inches apart. Estimated yields are shown in Table II. At

the same time, larger plots of approximately 0.4 acre of Nos. 3 and 7 were sown and the seed crops successfully harvested by grain binder when mature. No. 7, harvested on May 25, yielded at the rate of 797 pounds and No. 3, harvested June 2, at the rate of 166 pounds of seed per acre. It is apparent that weather conditions at Bard are not favorable to proper flowering and fruiting of the later maturing type.

In the Fall of 1945 the same six varieties planted at Beltsville in the Spring and destroyed by floods were planted at Bard and the planting repeated at Beltsville in 1946. The results of these plantings are included in Tables I and II. The plots at Beltsville again consisted of 40-foot rows spaced 30 inches apart and replicated four times while the Bard planting was made in plots of two 50-foot raised beds spaced 42 inches apart from center to center and replicated 8 times. Each bed consisted of two rows spaced 14 inches apart making 4 rows per plot. This system of planting is commonly used in that locality for vegetable crops to simplify irrigation. It results in an average row spacing of 21 inches compared to 30 inches in the Beltsville plantings. There is wide variation between seasons in plant growth and yields from the same varieties at both Bard and Beltsville. Apparently, varieties 1, 5 and 12 of the early type gave the best yields at Bard and 5 and 7 yielded best at Beltsville.

1. N. N. Ivanov, V. F. Grigoriva and A. I. Ermakov, Bulletin of Applied Botany 21, Nos. 4–5, 1928–1929.
2. Willkie, Herman F. and Kolachov, Paul J., Raw materials for essential oils. National Farm Chemurgic Council Bulletin. August 1940.
3. Katz, Alexander, Coriander successfully grown in the United States. American Perfumer & Essential Oil Review, V. 44, No. 11, Nov., 1942.

(To be continued in the October issue)

Foundation Bases Mixed to Order

The popularity of having one's own particular cream base mixed to match the skin continues to grow. But as faces are now slowly changing from the Summer tan to the sallowness of Winter some of the smarter stores, where salespeople operate on a free-lance basis, have ideas for additional sales, that produced most satisfied customers, who in turn sent in their friends.

Instead of discarding the mixture prescribed for the Summertime skin (it will be good later in the year) one store has had its sale staff sell a cream two shades lighter and when ready to apply to the face mix these together on the side of the hand and apply. For day-time use the lighter tone is combined first, for night-time use the lighter tone is used on top of the dark to give the smart contrast and to accent skin clarity.

"It's not so much selling merchandise across a counter," said the buyer of a style store, "as it is selling a woman an idea. Our sales have increased through the simplicity of the idea and we did it without trying to convince the woman that the base she had should be discarded. She will be back for re-fills and will purchase additional items."

How Hair Dyes Work

This is a continuation of the article which appeared in the February issue . . . Here the author discusses and gives formulae for some of the more complex modern dyes*

DR. FRED WINTER

COMPLEX modern dyes are put up in assortments of two bottles, one with a content of 10 cc, for the regular small size, and 20 cc for the large size.

One bottle contains the coloring liquid, the other the peroxide tablets. The bottle intended for the tablets should have a neck wide enough to permit introducing easily the urea peroxide tablets, which weigh 0.5 g. each.

DIRECTIONS FOR USE

Empty the tablets into a saucer. Fill the bottle which contained the tablets with water and pour this (10 cc in the case of the small size) on the tablets, crushing and dissolving them in the water. Then mix the peroxide solution with the content of the second bottle containing the dye, and apply the mixture.

Assortments

Assertments.	
Black	
p-toluylenediamine	5 g.
sulfo-para-aminodiphenylamine	5
sodium sulfite	10
global, 50 per cent	10 cc
Bottle 1	
10 cc of this coloring solution	
Bottle 2	
4 tablets of urea peroxide, of 0.5 g. each, dissolved in	10
cc of water	
Contact: 1 hour	
Chestnut	
p-toluylenediamine	2 g.
sulfo-para-aminophenol	2
sulfo-para-aminodiphenylamine	1
sodium sulfite	5
alcohol 10	00 cc
Bottle 1	
10 cc of this solution. Bottle 2, 3 tablets dissolved in cc of water.	10
Contact: 40 minutes	
Brown	
p-toluylenediamine	3 g.
sulfo-para-aminodiphenylamine	3
para-aminophenol	1
sodium sulfite	6
alcohol, 50 per cent 10	00 cc
Bottle 1	
10 cc of this solution	
Bottle 2	
3 tablets of 0.5 g. each, dissolved in 10 cc. of water.	
Cantant AR Tank	

^o This is the final article of a series of three. Previous articles appeared in The American Perfumer November 1948 and February 1949.

Blond	
sulfo-ortho-aminophenol	3 g.
p-toluylenediamine	1
pyrogallol	0.5
sodium sulfite	4
water	80 cc
alcohol	20 cc
Rottle 1	

10 cc. of this solution. Bottle 2, 2 tablets dissolved in 10 cc of water Contact: $\frac{1}{2}$ hour

METAL SALTS AND PYROGALLOL DYES

If, at present, the use of hair dyes on the basis of aniline derivatives is certainly widely spread, the use of metallic dyes has been maintained to a very large extent. For conscientious application, in expert hands, of a dye on the basis of metal salts, often gives results considerably superior to those obtained by means of aniline derivatives.

It can be easily verified that important progress has been achieved also in the realm of dyes on the basis of metal salts. So much so that the use of rudimentary forms, that is to say, of the coloring liquid, represented by the dissolution of a single metal salt, is being more and more abandoned. And this after it has been realized that success depends upon the complex action of appropriate mixtures of metal salts.

This fact deserves the greatest attention on the part of the manufacturer, in order to obtain, by a clever mixture, this complex action of the ingredients, thus improving the effect of the dye through the natural appearance of the shade and the great fastness of the metallic lacquers, with a deep and pure hue.

In this connection, let us recall the following facts: The addition of a small amount of silver nitrate or copper salt, to bismuth salt basis dyes, makes it possible to obtain deeper, and particularly, more tenacious and stable shades.

Such additions avert in advance the well known instability of bismuth sulfide lacquers, etc. Let us mention, in the same connection, the addition of copper or nickel salts to dyes on a basis of silver nitrate to obtain purer blacks. Let us mention also the favorable effect of cobalt salts in elementary silver nitrate dyes, to vary and deepen the tones of the chestnut range. We may add

Contact: 45 minutes

that similar additions to silver nitrate solutions aim at removing the metallic reflection.

Formulary	
Light blond	
1. cobalt nitrate	4 g.
copper sulfate	0.3
ammonia, 10 per cent Q. S.	
to cause the precipitate to dissolve.	
water to make up 1 liter	
II. Pyrogaliol	30 g.
water	1 liter
Ash-colored blond	
I. cobalt nitrate	2.5 g.
nickel nitrate	0.5
silver nitrate	0.2
ammonia, 10 per cent Q. S.	
water to make up 1 liter	
II. Pyrogaliol	30 g.
water	1 liter
Medium blond (on a pyrogallol basis)	
I. Pyrogallol	40 g.
ammonia, 25 per cent	100 cc
water to make up 1 liter	
II. Potassium sulfide	50 g.
alcohol	200
water	800
Bismuth dyes	
Solution A	
Glycerin	100 cc
neutral bismuth nitrate	100 g.
silver nitrate	50
glycerinated water 1:9 to make 1 liter	
Solution B	
Glycerin	100 cc
neutral bismuth nitrate	100 g.
glycerinated water 1:9 to make 1 liter.	

METHOD OF PREPARATION

Introduce the crystals in a graduated cylinder and pour in 100 cc of gylcerin. Crush the crystals in the glycerin with the aid of a strong glass rod, flattened at the end. Prepare in the meantime the glycerinated water 1:9 in a sufficient quantity and add, dissolving the ingredients slowly, making sure that this does not take place suddenly, in order to prevent any precipitation of the crystals. Stir briskly to cause the crystals to dissolve. Finally complete the volume with glycerinated water to make 1000 cc, avoiding always any too sudden addition of the solvent.

g.
g.
g.
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33
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g.
9.
q.
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g.
rs
g.
-

Block				
 Copper sulfate 				6 g.
Iron sesquichlo	ride			15
nickel sulfate				2
water				1 liter
II. Pyrogallol				40 g.
water				1 liter
	Medium	browns		
Silver nitrate	0.7 g.	0.2 g.	1 g.	-
copper sulfate	1	2	1	0.5
cobalt nitrate	6	4.5	5	5
nickel nitrate	1	1.5	-	1
ammonia, 10 per				
cent Q.S. to dis	solve			
the precipitate				
water	Q.S.	Q.S.	Q.S.	Q.5.
		30 g.; water,		
pota		50 g.; alcoh		
	water		800 cc	
	Single b	ottle Dye		
Blond				
Pyrogallol				40 g.
sodium sulfite				80
water				100
ammonia, 10 per	cent		4	100
Ash-colored blond				
Pyrogallol				40 g.
cobalt nitrate				20
sodium sulfite				80
water to make 1	liter			
Dark brown				
Pyrogallol				40 g.
sodium sulfite				80
cobalt nitrate				150
copper sulfate				50
water to make 2	liters			
Chestnut				100
Cobalt nitrate				100 g.
sodium sulfite				80
pyrogaliol			-	40
water			20	000
Biack				
Pyrogallol				50 g.
Iron sesquichlorid	le			100
Nickel nitrate				200
Sodium sulfide				100 g.
water			20	000

METHOD OF PREPARATION

Dissolve the sufite in water; then the pyrogallol and finally the metal salts.

These dyes should be packed in bottles filled to the neck and properly stopped.

The shade develops only very slowly in the air.

HENNA RASTIKS

Henna Rastiks when aplied by experts give splendid shades. I should have desired, therefore, to go more thoroughly into this subject. Unfortunately, the limitations of this exposition do not permit me to devote more space to this type of dye and extend myself in further explanations which are useful for a deeper study of the technique of preparation and application of the henna rastiks.

However, I hope that in the near future I shall be able to present to my readers a special article dealing with the henna rastiks and thus emphasize the great artistic value of these hair dyes, a value which resides in the richness, the beauty and depth of the shades which they make it possible to obtain.

Medium blond	
Powdered henna leaves	30 g.
Iron filings in the form of an impalpable powder	10
Powdered rhubarb roots	30
Borax	2 g.
Ammonium chloride	2

Applied cold in the form of a poultice for 30 minutes, this mixtures gives a beautiful medium blond.

When this rastik is applied with prolonged heating by means of a heating helmet of adequate design, the following results are obtained:

After 30 minutes a															
After 45 minutes a															
After 1 hour at 60°	C	 		 				 				1	Da	rk	chestnut

This example shows the diversity of the results and their modification, according to certain details of the technique of application used.

Here are still other mixtures of this kind:

Chestnut	
Powdered henna	100 g.
Pyrogallol	6
Copper sulfate	7
Burnt sienna	8
45 minutes at 60° C.	
Light chestnut	
Powdered henna	40 g.
Iron filings	30
Cobalt nitrate	2
Pryogallel	1
30 minutes at 60° C.	
Brown	
Powdered henna	40 g.
Iron filings	40
Cobalt nitrate	2.5
Iron sesquichloride	3
Pyrogallol	3
45 minutes at 60° C.	
Jet Black	
Powdered henna	40 g.
Iron filings	30
Pyrogailei	3.5
Iron sesquichloride	A
Dry logwood extract	10
Copper sulfate	2
Nickel sulfate	2
1 to 1 1/2 hours at 60° C.	

Drug Store Shopping Habits

Batten, Barton, Durstine & Osborn, Inc., New York, N.Y., has completed a study which reveals why women went into drug stores, what they had planned to buy, what they actually bought, how much money they spent, etc. This study was conducted in the BBDO National Panel of Consumer opinion, a panel of 3,000 families representative of families in towns of over 2,500 population across the nations.

With each woman reporting on one drug store visit, it was found that the median expenditure for all items purchased per visit was \$1.07. Expenditures were practically the same in both chains and independents, but it was found that the median expenditure in the drug stores usually patronized was 68 per cent higher than in drug stores not usually patronized.

As proof that brand names are registering, it was found that 85 per cent of the branded items purchased by these representative women were asked for by brand name. Ninety-six per cent of the women entering a drug store bought something, and 48 per cent of these women who made purchases admitted buying one or more items which they had not planned to buy before entering the drug store. Display was the principal motivating force leading to unplanned purchases, and BBDO found that 82 per cent of all unplanned purchases by these women broke down into 13 major categories.

Desert Flower Sleuth

Capturing the odors of sweet-scented flowers which thrive on the New Mexico desert wastelands and putting them in perfume bottles has been accomplished by an Easterner from Cleveland. Howard Foncanon, who operates a perfume shop in Albuquerque, New Mexico, said he already has captured the scent of the Yucca plant, the ginger flower and other prairie flowers.

Right now, Foncanon said, he's working on a tough one: Getting the delicate aroma of the pinon, a ground-hugging pine, into a bottle. Foncanon originally set out from Cleveland for Arizona last year. He said he found the arid desert around Albuquerque filled with sweet-scented blossoms and decided to stick around.

Cosmetic Excise Tax Collections

Tax collections for the twelve months ending July 1949 are:

	1949	1948	1947
January	9,648,063	10,371,512	
February	12,984,776	12,290,714	
March	6,796,181	6,927,991	
April	6,913,884	6,927,991	
May	6,983,445	6,660,851	
June	7,625,450	7,283,509	
July	6,776,881	7,332,070	
August		7,506,518	6,392,678
September		6,890,757	6,733,695
October		6,335,804	7,048,093
November		6,872,541	5,386,690
December		8,079,746	8,545,762



"You're not paid to do atomic research; we're a cosmetic house!"

What the Fragrance Foundation

What The Fragrance Foundation is doing and intends to do, and what this means to the supplier,

MORE than a year ago, a few men in the perfume products industry realized that there was a great need for education of the American consuming public on the proper uses of fragrance products. Due to the foresight and ceaseless energy of this handful of business men of our industry, The Fragrance Foundation has been organized for the purpose of educating women throughout the country on the why, what, where and when of perfume and its allied products.

As almost everyone in the toilet goods industry knows, The Committee on the Use and Marketing of Perfume Products was formed in the Spring of 1948 to study the conditions of the fragrance products industry. Its first effort was to raise sufficient funds for a survey on the use and purchasing habits of the consumer, conducted by The Psychological Corporation of America. A myriad of facts was uncovered regarding the use and marketing of perfume products. The results of this preliminary survey made it overwhelmingly apparent that there was considerable need for cooperative work on the part of the entire industry to reeducate the consuming public on the purchase and use of fragrance products.

Already the work of the Committee has borne considerable fruit in the merchandising and advertising activities of many of the leading houses in the industry. However, since the project is a long-term activity, wide support of every member of the fragrance industry is needed for its work. The responsibility for success of this work is the business of every company who benefits from the sale of products where fragrance is the compelling force for purchase and use-whether they deal wholly in these products or only partially. The wide scope of this educational program will bring results of increased consumption which is of interest to everyone who has any stake in perfume products: essential oil houses, suppliers, retailers, as well as the manufacturers of finished

The Fragrance Foundation was incorporated in June of this year to carry out the work so splendidly started by the handful of men who formed The Committee on the Use and Marketing of Perfume Products. These men who have given so unstintingly of their time and energy -and money-laid the ground work for comprehensive plans on education, not only of the consumer, but also of the salesgirl, who is our direct contact with the consumer. The time now has come for the entire industry to support this program. Membership is open to every company who is interested in the purposes of our work and who is a member of The Toilet Goods Association.

The cost of membership is nominal so that every company interested in fragrance can be advised by bulletins of the activities of The Fragrance Foundation and thus benefit from its program. A Coordinator has been appointed to carry out the organization's activities under

the direction of its officers and members.

A meeting of the full membership of The Fragrance Foundation will be held early this Fall for the election of Officers and Board of Directors. The original Committee which incorporated the new organization will be dissolved at this meeting, and the work turned over to the newly-elected officers. It is within the power of you who are in the fragrance business to decide, through membership in The Fragrance Foundation, which men of our industry will direct the most important promotion of your products that ever has been conducted.

The activities of the Foundation can be divided into several categories; such as, publicity, advertising, education of salesgirls, trade relations, merchandising-all designed to increase the consumption of products where fragrance is the compelling force for purchase and use by millions of consumers. The potential is enormous. No one at this time can foresee the total scope of the over-all effects of this work. However, it is evident from the work already started that far-reaching results can be achieved by the cooperation of all those interested in perfume products.

The entire national press is giving unprecedented support to the informative material sent out by us. Every day, consumer magazines and newspapers are informing their readers on the importance of fragrance to a woman, and how to use it. Similar information is broadcast to listeners of radio programs throughout the country.

Means to You!

manufacturer and retailer.

Every publication of the trade press is running informative material on fragrance for the attention of retailers and salesgirls. There is every reason to believe that this support on the part of the press will continue, and grow even stronger, making the millions of consumers in this country so fragrance conscious that they will become steady users of our products.

Important stores in every part of the country have been contacted, asking for their cooperation with our work. The response has been surprisingly enthusiastic and prompt on the part of toilet goods buyers and top management. Promotion suggestions and fundamental information on fragrance products for better selling on the part of salesgirls, have been sent to the large number of stores who have expressed a desire to work with us.

Our plans for the coming year include sales training material for every salesgirl as well as educational material for schools and women's clubs.

The budget of our organization is modest for the work projected. We do require, however, the active support of all manufacturers of finished goods, all members of the essential oil industry, all suppliers and all retailers, in order to accomplish in full measure the objectives of our program. Membership in the Foundation is an investment which will pay off because it brings to each membership company the collective thinking of the entire industry. The advice and suggestions of our organization is available to every member company. The cost of membership will be many times repaid through increased consumption of all fragrance products resulting from the educational work of our organization, The Fragrance Foundation.

In order to accomplish the extensive program planned for the coming year, we need enthusiastic support of everyone connected with the fragrance industry. Now is the time for every company interested in fragrance products—supplier, essential oil house, manufacturer of finished goods, publisher—to support the activities of The Fragrance Foundation. The successful accomplishment of our plans will increase the sales of every company in the business of fragrance products.



Miriam Gibson French

Miriam Gibson French started her business career as a typist-telephone operator. From that beginning, she found herself occupied in a great variety of pursuits. She was, at various time: A secretary to a doctor, an interior decorator, a real estate salesman, secretary to a banquet manager, editor of the Tower Radio Magazine, associate editor of Movie Fan Magazine. She has freelanced articles and promoted personalities. She has been active in the motion picture and radio industries.

Mrs. French began to point her activities more directly toward the toilet goods field when she joined Shulton, Inc., as publicity director. After five years, she became beauty editor, then promotion director of Charm Magazine. For a year-and-a-half she had her own office as merchandising, promotion and public relations consultant. Among her clients at that time were: Guerlain, Helena Rubinstein, Jean Nate, and the publicity program for the fight to repeal the 20 per cent excise tax on cosmetics. Currently, Mrs. French is Coordinator of The Fragrance Foundation.

Mrs. French attended Cathedral School of St. Mary and Mrs. Dow's School in Briarcliff, N.Y. She was born in Mt. Vernon, N.Y. For hobbies, Mrs. French has only one, her husband.

Normal Merchandising Gets Response

Buyers tired of half-price sales . . . Gadgets still important, but trend is toward quality merchandise . . . Too many lipstick colors in all brands . . . Will shorter haircuts affect home permanents? . . . Colognes and deodorants sell heavily . . . More men buying deodorants

CHICAGO

Space New Items

THE Middle West has enjoyed a "double" season's selling on colognes. Not in years, some say since 1934, has there been such a demand for cooling lotions.

The only complaint made has been that many of the better fragrances are so poorly bottled, as to hand, that they slip. Several stores report clearing out such bottles because the sale was slow and queries proved why.

If manufacturers of cosmetics have thought of buyers as being choosy, they have yet to learn just how choosy these people can be. Here are some of the facts which buyers are marshalling for the benefit of cosmetic makers: Too many lipstick colors in ALL lines. Reduce these for volume and have the shades definite rather than so close that comparison, by the average woman, is difficult. The same is true of nail polishes, on which many buyers see a type of red that is not listed in any of the shades.

At the moment there are more buyers up-in-the-air without benefit of a plane, than seen in a long time due to the tooth-powder, tooth-paste situation. Here is a summation of what they say: "Why should a firm put out two and three sizes in a tube, the same in powder and then top these all off by adding the same sizes, etc., containing the new ingredient. Yet, there was no recall or discount allowance made on the stuff we had in stock.

These buyers say that one size in a tube (excluding the 5 and 10 cent store size) and one in powder will permit them to do MORE business than the half dozen conflicting styles and prices and sizes now featured. "Select the best seller in tube and can," they advise, "and discard the others."

This idea of variety in size, price and often packaging carries over into the deodorant field.

The entire industry wants more stabilization in its products. New items are wanted, yes, but not every week. There is no time to build up a following and then if a maker cannot follow up his flash promotion with mer-

chandise, a buyer throws the item out, and the consumers are disappointed as well as disillusioned.

Slow movers last month were: \$1 compacts yet those at \$3.95 and \$5.95 sold in substantial volume; soaps in the cheaper lines; cheap dresser sets, yet quality comb and brush at \$12.95 moved well whereas the \$3.95 (formerly a good seller) was dead.

What has moved: The quick set ideas for hair to retain the curl. The new wrinkle remover that has also been in too short supply, in Chicago and in Duluth. St. Louis, Chicago, Twin Cities, Detroit all report excellent acceptance of the new bellows-bottle spray deodorant. It will continue to sell at \$1 if a cheaper size is not produced. Half-prices on well known name brands of cream and lotion cut into this sale in Chicago. The newly featured hand cream to remove freckles, etc., has been of interest to consumer but poorly featured in departments. Chicago and most Middle West cities presented it, with Block's and Mandel's advertising it. Some stores have it on the bargain counter . . . already.

Solid colognes had their really big sales impetus when the hot weather made their application both cooling and refreshing. It had Middle West presentation and many of the displays were cool in appearance—as trays of dried ice conveyed the idea of a cooling ice.

Several stores now offer plastic jars and bottles which one may fill with her own products for travel. These are selling much better than buyers anticipated. There is room for these in all cosmetic kits.

Every buyer finds that bath salts, oils, etc., are still in top selling brackets, but they also want ones which DO NOT LEAVE A BATH TUB R-I-N-G!—Jean Mowat

PITTSBURGH

Strong "Back To Nature" Trend

ONE classification in the cosmetic end of the business that apparently shows no decline concerns items for the bair

There seems to be an ever-increasing interest in the

products women can use at home to beautify their "crowning glory"—hair. This covers many items and is not centered on home permanents only, although the demand for them continues to hold up very well.

As one buyer put it, "A new shampoo, or almost any item for the hair, immediately rates a listening ear from the customer."

Along this line, it was found that a majority of salesgirls interviewed report a great interest in any shampoo containing egg. Some of the girls were of the opinion that the use of an egg shampoo has a slight old-fashioned slant (many have heard that a raw egg, beaten up, was good for the hair), and for that reason might have appeal. At any rate, many women apparently like the idea and tend to be interested in such shampoos.

In face creams, a "back to nature" slant is noted too. If a cream is described as having milk in it, or the word "milky" is used in instructions on how to use it, women like the idea. This, too, could be a hold-over of all the fan fare given to a famous movie star's use of milk in her beauty routine many years ago.

One saleswoman said that, much to her surprise, even the younger customers have heard about the "milk legend" and connect it with beauty.

Interest in cosmetic products that have water-proof qualities has been noted. Make-up that stays on while swimming, a lipstick that may be used, mascara that isn't affected by water, all have had appeal this Summer.

Another Summer interest has been deodorant soap. While some salesgirls have expressed the opinion that sales would have been greater if prices were lower in this line, they say there has been a growing demand for this item. It isn't great, but appears to be catching hold.

Sales of deodorants are now made to more men than in the past, it is reported. Soaps appeal. Generally, however, clerks say men don't like types that have to be applied—like creams or liquids that do not spray on. There has been interest in "squeezeable" bottles. Non-spill and easy-to-pack types rate. Pastes in tubes, rather than bottles, are also preferred.—Lenore Brundige

CINCINNATI

People Show Pre-War Buying Habits

CONTINUED torrid temperatures in Cincinnati led to two new habits regarding cosmetics. With Stopette, Heed, and Sprite, liquid deodorants in squeeze bottles, and several cologne deodorants also coming on to the market, the town as a whole took to the new easy-to-apply deodorants. All stores featured the new liquid deodorants and all reported great success with them. Tussy, one store announced, would put out a similar squeeze-bottle deodorant this Fall, but the store planned no particular promotion of this since deodorants, sorry to say, are seasonal items.

The other new habit was the usage of solid colognes. The reason for the big success of both Tabu's and Lucien Lelong's solid scents was the newness of the idea, the ease and safety of carrying it for travel, and the

slight tingling cool feeling to the skin upon application. At any rate, buyers felt it was here to stay.

Several counters reported extra strong sales of Toni since the new spin curler has been introduced. Dow's Drug chain "can't keep Toni in stock."

Another fast-moving one is the Revlon "Lip-Kit" with three lipsticks at \$1. Mabley and Carew told of an especial run as a result of newspaper advertising and a window display. A display without advertising brought the store hot sales on Tussy's "Midnight" cologne. In the same store, a large display and news ad brought big sales on Roger and Galet sachets at two for a dollar.

Penney's pursued the mark-down policy with Naylon lipsticks at two for a dollar (in dollar sizes) and with Dorothy Perkins's \$1 cologne and \$1 deodorant, at a dollar together, and had success.

Clerks had few complaints about sales, with the exception of one, who charged that it was not only the federal tax that kept cosmetics from selling as they should. "We need to go back 20 years and give them the old one-two. Stores and the toilet goods industry have a defeatist attitude. They're not aggressive enough; they're drifting with the tide. We need more ballyhoo about glamor with more intensive national advertising, not price changes. The recent drive by John Ropert Powers, who took \$20,000 of our business with him, proves that people will buy cosmetics from the people who go after them."—Mary Linn White

LOS ANGELES

Sales Girls Show More Interest

TOGETHER with a feeling among toiletries buyers that gadgets are still important, there is a definite impression that quality merchandise should receive increasing attention. Van Venneri of the I. Magnin chain of top specialty stores says that cigarette cases, hair drying turbans, jewelled lipstick cases, and other items formerly not regarded as toiletries section sellers have been, and still are, important to her maintenance of volume. Yet Marcel Rochas's new men's line, Moustache, priced in an extreme top bracket is receiving an excellent acceptance there and in other top stores out here.

There has been so much half price business done that buyers are feeling that the time has come to get away from that kind of thing and round the circle back to increased unit sales with a corresponding increase in markup. They're tired of half price, and they feel that whether consumers are or not the condition is unhealthy. Of course the season has some influence on that feeling. With holiday business looming on the horizon, buyers are ready to decrease pressure on specials and half price sales and begin to emphasize quality at full price. Magnin's is featuring imported French perfumes and toilet waters. The White House and City of Paris, San Francisco, both have added expensive French imports to their displays, and are building them up through their newspaper advertisements. Seasonally Los Angeles is always a step behind San Francisco, but already indications are not lacking that the same kind of merchandising sense is coming up there.

The New Esoterica hand cream for the removal of brown spots on hands has met with whole hearted acceptance out here.

The accent is still on hair goods. Several different makes of chemical containing turbans for drying hair are being displayed, and reports are that they are moving well. They lend themselves to a type of display unusual in cosmetic sections, and buyers are availing themselves of it.

You can sense more interest among sales girls. Talks by representatives are welcomed. Salesmen are invited now to explain their lines to groups of salespeople, where formerly nobody had time nor interest for that kind of thing. Educational material from manufacturers is welcomed, and used. The overall picture on the Coast now is a definite settling into good merchandising and selling, with plenty of attention to volume producing gadgets, and an increasing acceptance for quality merchandise in higher price brackets.—Don Cowling

BUFFALO

Christmas Buying Has Started

DESPITE the new developments of recent months, new ways of administering to old needs, and the new packaging on old items, buyers still place great emphasis on the buying appeal of still more new items. So even though some companies are reducing their operational budgets, it is to be hoped that they don't cut down on their imagineering.

Most stores report an ever-growing preference for liquid deodorants in plastic spray bottles.

The buyer also reported that the small-sized trio package of three lipsticks, offering a variety of three shades for \$1.00, is a wonderfully salable item, being equally as welcome for personal use as it is for gifts. Cream makeups top all types at J. N. Adam's, proving just as popular in Summer as they are in Winter.

Christmas buying has started at this store with a bang with Mais Oui gift packages well in the lead, with Evening in Paris doing a tremendous volume on its gift package which combines bath powder for \$1.25 with cologne for only 10 cents extra.

Packaging garnered two special comments this month. One, that package exteriors be washable so as to permit a constantly clean appearance. The other, that if manufacturers insist on white or delicate pastel packaging, it would be advisable to encase them in Cellophane to assure a bright freshness at all times. Though clerks keep packages dusted constantly, there are certain packaging papers that are more absorbent than others, and once even a bit of dust assails their surface, they just never look as good as they once did, and still should.

In the perfume line, the suggestion was made that a more limited number of fragrances and less wide variety of bottle sizes be presented.

Conversely, lipstick sales were reported to suffer when

a line offers, for instance, only two colors instead of the five and six offered by competitors. Regardless of how excellent the quality of the two lipsticks offered by any one line, Madam Public may be safely said to prefer variety to goodness, quantity to quality.—Maggie Flemming

ATLANTA

Successful Promotion

W HAT usually turns out to be about the dullest cosmetic season in Atlanta, extending from the latter part of July until the latter part of August, was granted a timely respite this year by Revlon's Color Casting promotion.

Along with their general expansion program, Davison-Paxon moved their cosmetic department over to an increased area directly in front of their elevators, which also placed it strategically between their two first floor escalators, feeling that it would catch the eye and maybe the pocketbook of the customers waiting for the elevators, as well as those ascending and descending the escalators.

It is a little early yet for them to note any definite increase in sales, but in their general store-wide celebration sales, scheduled to start August 23, plans are underway to have special sales throughout this department in an effort to attract more people to these counters, thereby introducing them to their various expanded lines.

All the stores are glad to give credit to special representatives from different houses who have helped them raise their sales totals by continuing to visit their departments during the vacation months.

For example, their initial response to Marie Earle's Araline was so great that they have requested another visit from the representative from this house as well as extra supplies of the product.

So far none of them have noticed any unusual activity directly attributable to back-to-school movements. However, it has been an unusually hot college show and school clothes promotion period, which no doubt accounts, at least in part, for the sluggish attitude in buying. All of the downtown stores did feature special cosmetic lines in presenting their annual college fashion shows and at least two of them gave away small favors from cosmetic houses to the guests who attended the shows.

Only one store has held its own in perfume sales during the Summer months—Rich's. They put a lot of time and effort behind their perfume promotions, always introducing a new fragrance with attractive displays and a small fountain which sprays the new scent in the vicinity of their main entrance. They concentrate all their perfumes in one spot, called a Perfume Bar, which is also placed at their main entrance.

Hair preparations have been the biggest Summer sellers here, including everything from conditioners to shampoos to brilliantines down to color rinses. Home permanents are apparently a favorite recreation in At-

lanta with Toni's new spin curler converting new devotees every day.

Sprite deodorant has been a terrific seller in Atlanta, because, as one buyer explained it, its timing was absolutely right. This, they all admit, is a big factor in determining the initial acceptance as well as repeat sales of new items.

Drug departments, which, of course, includes drug stores as well, have all had a very remunerative season with soaps.

All the buyers are excited about the new attractive packages that are being introduced in certain lines and are assured that eye-appealing wrappings contribute considerably to sales, especially with new products.

-Maynita Gerry

DALLAS

Leg Make-Up Sales Off

C OSMETICS promotions have been divided into two distinct approaches during the last month in Dallas. Counter displays and individual advertisements in the newspapers have concentrated on hot weather articles. Window tie-ins and fashion ads have been tailored to fit the Fall merchandise now being presented to the public.

Summer colognes, both stick and liquid, and deodorants have continued to set a fast pace. Demands for perfumes, especially the heavier odors, have fallen almost to nothing

Most departments are concentrating on clearing out their Summer merchandise in preparation for Fall so that packaging and odors will be in line with the season. However, there have been no large scale sales, only specials in one or two items.

More and more emphasis is being placed, especially in the department stores, on training personnel to know their products. They are finding that an increasing number of customers want specific information about products; that they are more dollar conscious, but will spend if they are certain that they are getting their money's worth. Packaging plays a major part in attracting customer's attention, but packaging alone is not enough. The clerk must have some facts to cinch the sale. It is becoming more and more important for sales clerks to be familiar with the national advertising done on the lines they handle as well as for them to be familiar with the overall presentation and policy of the store especially in regard to fashion lines. This kind of coordination is being practiced more consistently.

The most spectacular trend recorded by the chain drugs is the sale of the new ammoniated tooth paste and powder.

Although there are still some sales in leg make-up, these seem to have fallen sharply this Summer. Lots of Dallas women go without hose but rely upon the sun to get a becoming dark color. Use of depilatories for legs continues to gain over the old fashioned razor blade.

Sales of the Toni home permanent continue high

since the introduction of the new curl wrap with Richard Hudnut running a close second in most stores. Dial, the new deodorant soap, has been well received. Other fine, specially scented soaps have done well in departments using them for special promotion.—Jean Shaffer

NEW ORLEANS

Other Activities Hurt Cosmetics Sales

C OSMETICS had rough sledding in New Orleans this month, in competition with other merchandise. Preoccupied with their traditional August furniture sales, August coat and fur sales, and finally with their citywide Community Bargain Days, store executives gave less than usual attention to the importance of smooth skin, sweet smells and other cosmetic promotion ideas.

Maison Blanche surprisingly devoted a whole front window to its cosmetic department, an unusual departure from store policy. However, the bargains were confined to its own brand talcum, tissues and toilet paper, and a special on boudoir lamps.

Other stores, where fashion is featured even during the community sales, permitted a few bottles of perfume to appear discreetly in the corners of their windows. Kreeger's gave the king-size bottle of Tabu a good play; and Gus Mayer less conspicuously showed flacons of Matchabelli, Carnegie, Rosenstein and Caron scents, NOT at bargain prices. Only Godchaux, among the specialty stores, went ahead with its usual cosmetic window.

Aside from sale days, most stores are busy with the usual August emphasis on special fashion merchandise: school clothes and advance coat sales, which don't lend themselves so well to cosmetic tie-ins. September should be a better month, when the usual fashion promotions get under way. However, D. H. Holmes, sponsoring the Mademoiselle Back-to-College Fashion Show in the Roosevelt Grand Ballroom, managed to find a place for cosmetics, presenting each of the guests with a trial size Dorothy Gray lipstick in the new South America shade, and with a trial package of Mary Imogene Shepard's Baby Skin Oil and Soap. One of the models carried a Harriet Hubbard Ayer fitted case. But no manufacturer was credited with the models' make-up, showing that somebody missed a good boat. In New Orleans fashion shows are well-attended by an audience which can afford to pay not only for the lunch which precedes the show, but for anything it sees in the show, including a new cosmetic label or hue.

In general selling, August remained a slow month although End-of-Summer hair problems gave an impetus to the sale of shampoos, conditioners and the increasingly popular home permanents. Drug stores were featuring the Hudnut manufacturers' special: specially packaged creme rinse and egg shampoo for \$1. Some buyers wondered what effect the spreading vogue for short hair would do to their home permanent sales, since the short ends of the feather cut are harder for the amateur to tackle than a longer hair style.—Glendy Culligan

BOOK REVIEWS

ORGANIC ANALYTICAL REAGENTS, by Frank J. Welcher. Four volumes. 2189 pages, 6 x 9 inches. 1947-1948. Indexed. D. VanNostrand Co., New York. Price \$8.00 single volumes, \$28.00 in set of four volumes.

The full scope of this mammoth reference work is not indicated by its title. Not only are these four volumes a collection of methods involving the use of organic analytical reagents, but they are probably the most comprehensive publication in the English language on the qualitative and quantitative estimation of organic and inorganic chemicals.

To appreciate the work done on this series, one need only to remember that more than 11,000 publications were reviewed by the author. Over 10,000 references are given in the combined work. One may wonder where the library facilities could be found for such an undertaking. The author clarifies this point in his acknowledgments. Apparently, the fine library of Eli Lilly and Company of Indianapolis was made available to the author. This, together with the public library and the Indianapolis University Library as well as the Advance Paint Company Library, all of Indianapolis served the author in good stead. The entire work appeared in single volumes, published several months apart over a period of about a year and a half.

The material is arranged giving the formula first, properties, molecular weight, Beilstein reference, method of preparation and full directions for the detection and determination of every chemical for which the particular reagent may be used.

The reagents are divided by families, thus volume 1 includes, among others, alcohols, phenols, ethers, aldehydes, ketones, etc. Volume 2 covers organic acids, hydroxy acids, amino acids, esters, amines and quaternary ammonium compounds to only name a partial group. Among the subjects covered by volume 3, are pyridine and its derivatives, quinoline and its derivatives, the oximes and the acidic amino compounds. Volume 4 brings in all the odds and ends, such as acidic nitro compounds, the arsonic acids, the xanthates, miscellaneous sulfur compounds, alkaloids and dyes, for example.

Each volume is indexed separately to the contents in that volume. The index is arranged alphabetically and according to the uses of the organic reagents.

There is practically no test method required that is not mentioned in these over 2000 pages. The author is to be congratulated for having made the tremendous personal sacrifice that was required to complete this task, at the same time special recognition should be given him for completing a much needed work.

This is one of the most important reference works in analytical procedures and should be in every analytical chemist library.—M. G. deN.

REICHSTOFFE UND PARFUMIERUNGSTECHNIK. Dr. Fred Winter. Vienna 1933, republished in German in the United States, Edwards Bros. Inc., 1948. Cloth covers, 377 pages. Price \$9.

The re-issue of this, one of a series of hard to get books for the perfumer's working library, constitutes a real service to the art, making available again a valuable reference work of high standing.

The first section is a comprehensive review of the characteristics, chemical structure and odor properties of fragrant substances, natural and synthetic, intelligently grouped. The second section is introduced by a discussion of the theory and practice of compounding, some interesting thoughts on harmonies and contrasts, and the role of natural and synthetic ingredients in the formula. A series of formulas for conventional fragrances follows.

All things considered this formulary has a definite inspirational value. With some imagination many of these recipes could be used as foundations for creations in the modern style providing advantage is taken of the newer ingredients which have become available in late years.

THE CHARACTERIZATION OF ORGANIC COMPOUNDS, by Samuel M. McElvain. 282 pages, illustrated and indexed, $53/4 \times 81/2$ inches. The Macmillan Co., 1947, price \$3.90.

There should be nothing like a book from the pen of a practicing teacher, for more than anyone, a teacher can learn the weakness of other texts when in the hands of students. Knowing the failing of other texts and the needs of the students, the teacher should be able to write a useful book. The proof is in the pudding. The author's effort is the result of over 22 years of teaching at the University of Wisconsin a subject which forms the title of this book.

After arguing with himself as to whether it is better to have the student use the library, searching texts or journals for information on derivatives, or to have the information in the students' text book, the author settled on the latter course . . . good for him!

Methods described appear to be quite thorough. The physical characteristics of hundreds of compounds are included, although the author makes no pretense at offering a complete list.

It is a useful book for laboratory assistant as well as student. When one realizes that most laboratory chemists in the cosmetic industry are not called upon to characterize chemical compounds very often. They in particular will find this a useful book,—M. G. de N.

INTERNATIONAL WORLD WHO'S WHO, G. G. Sampson, editor. Simulated leather covers, 6 x 9 in., 1854 pages. 1948–1949 edition. Sampson Publishing Co. Inc. Price \$18.50.

Special interest will be maifested in this useful work containing about 13,000 biographies of important men and women of the world from practically every field of endeavor, because it was edited and published by G. G. Sampson who for 16 years was in charge of all European activities of Richard Hudnut.

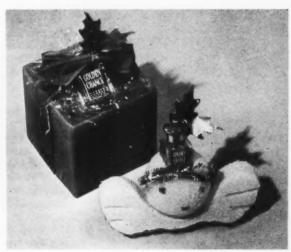
The book, which is just off the presses and weighs incidentally five pounds, is meticulously printed on fine paper and the sturdy binding and covers with gold stamping add materially to its serviceableness.

It is a source of ready reference in a concentrated, comprehensive form on thousands of important personalities who are often in the news or whose activities are of interest to the world in general. It is evident that care was taken in framing standards for inclusion in the volume and that selections were made solely on the basis of merit.

Dackaging

For Christmas





AYER

MATCHABELLI

Two of Matchabelli's most popular colognes, Holly Berry and Potpourri, in one-ounce, screw-capped bottles are packaged in a box displaying carolers in snow against a background of snow-roofed houses and blue sky. \$1.00

Seaforth has an inexpensive

Christmas package containing lotion, cologne and talc. Priced at \$1.25

Ayer's "Lazy Angel" has a bottle of Golden Chance perfume nestled behind a halo. A sprig of green and gold foil holly and sequins complete the holiday picture. Retails at \$1.50. A plump red candle with Golden Chance perfume, tied with red and green holiday ribbon and foil holly sprigs sells for \$4.00

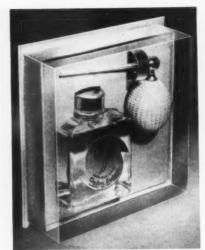
Containing cold cream, vanishing cream and freshener, Pond's "Charm Kit" is decorated with white scroll on blue. Sales price .49.

POND'S





& Essential Oil Review



OGILVIE SISTERS



COTY



CUTEX

"Swing Hair Fragrance," by Ogilvie Sisters, features hair perfume and deodorizer in a new package. The attractive atomizer is sturdy enough for unlimited re-use. The kit was developed not only for the holiday trade, but is ideal for a week-end gift, or for personal use. Cost \$2.25

Coty offers one dram of L'Origan, Emeraude, L'Aimant or Paris in a clear plastic ball, decorated with a metallic plume, ready to hang on the tree for \$3.50

A red genuine leather kit, containing two bottles of nail lacquer, lipstick, Twincote, oil, lacquer remover, pusher, emery boards, orange stick, nail file, cuticle scissors



YARDLEY

and tweezers, is presented by Chen Yu. Retails at \$12.50

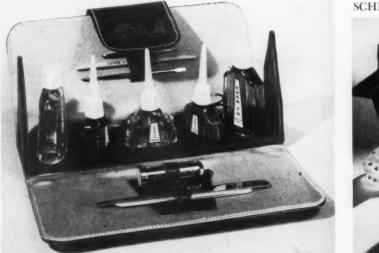
Cutex has a holiday gift of polish, cuticle remover, orangewood stick, emery boards and cotton. Packaged in floral design box. Retails for \$1.00

A gift for men is presented by Yardley in a set consisting of soap, lotion, talc and hair tonic. The box has a grey background imprinted with jungle scenes. The talc comes in aluminum containers, lotion and tonic in green and blue capped bottles. Sells at \$3.95.

Three new sizes have been added to the Schiaparelli Zut line. They are: The one ounce, one-half ounce, and "refresher" purse flacon. The metal cap and label are in Zut colors of green and mauve. Prices are \$25.00, \$15.00 and \$3.00

CHEN YU





224 September, 1949



The American Perfumer



GOURIELLI

It's a logical idea to add the "Shave Bucket" to the Gourielli Here's How line for men since the cocktail shaker bottle has been so successful. The miniature aluminum ice bucket comes complete with shave soap. Retails at \$1.50

Houbigant combines Quelques Fleurs and Chantilly perfume in a new Christmas window setting. It is realistic down to a small holiday wreath and lacy curtain design. Sales price \$3.50

Tussy offers Terpsichore, Tahmina, and Safari, each in a half dram gold-topped glass bottle in a red leather boot, complete with white cuff trim. The three boots are attached at intervals to a bright red cord. Sells for \$2.00

The Early American Old Spice Vanity by Shulton is decorated in



HOUBIGANT

the usual Old Spice colors. Containing a mirror, it makes a bath or dressing room accessory. The Vanity contains toilet water, dusting powder, body sachet, soap and sachet tables. It retails for \$6.00.

Merry Christmas is said by Lentheric with a red and white gift card that, when opened, shows a gold Christmas tree in the center of which is attached a one dram container of a choice of six fragrances. The card comes boxed for mailing. Priced from \$2.00 to \$3.25

Richard Hudnut offers "Dream House" for Christmas. A bottle of Gemey perfume and another of essence are housed in a snow-topped cottage. Price \$3.25



TUSSY



SHULTON

LENTHERIC

RICHARD HUDNUT



& Essential Oil Review

FLAVORS

Peppermint

Peppermint is very likely the most important of the mint flavors, a position it owes to the cool, fresh flavor it confers on those products in which it is used.

MORRIS B. JACOBS, Ph.D.*

THE cultural directions for the growth of peppermint plants in which such topics as soil requirements, preparation of the soil, the use of fertilizers, irrigation of the peppermint plants which are a crop requiring considerable amounts of water, propagation and planting, and cultivation for the elimination of weeds are considered, have been fully described by Sievers and Stevenson in their bulletin on "Mint Farming," U. S. Department of Agriculture, Farmers' Bulletin No. 1988, April, 1948.

It has been shown by various investigators that the peppermint plant generally contains the maximum amount of oil when the plants are in full bloom. This is the stage then at which the plants should be harvested. Thus in one investigation, the amount of oil obtained (1) before and (2) during bud formation, and (3) during and (4) after flowering was determined. The amount increased up to the third period, that is the flowering period and then decreased. However, there are a number of factors which affect the blooming so that in some years the plants have few blooms thus making it difficult to decide the proper time of harvesting.

There is no need to rely on the blooming period as the criterion for harvesting because a relatively simple distillation can be made to assist in deciding the time of cutting the peppermint herb in order to obtain the highest oil yield. This test devised by Ellis and co-workers (N. K. Ellis, L. J. Swift, and M. H. Thornton, Indiana Agricultural Experiment Station Department of Horticulture, Mimeograph, A Method for Telling the Time of Cutting Peppermint for Highest Oil Yield, June 1944) consists of making trial distillations of representative field samples as the peppermint plants grow.

The biogenesis of the oils of American black peppermint is discussed by Kremers (J. Biol. Chem. 50, 31 (1922)). He drew a relationship between acetone and acetaldehyde with the subsequent formation of isovaleraldehyde from which citral is probably obtained from which in turn, citronellal, isopulegol give rise to the principal components, menthol, menthone, limonene, and the other components previously mentioned. The general topic of biogenesis of essential oils in plants is discussed by Guenther in his book, Essential Oils.

Peppermint oil is obtained from the plant by means of steam distillation.

In general the equipment presently used consists of a steam generator, a still (commonly called the boiler and the tub, respectively), a condenser, and a receiver. All of this equipment is customarily housed under one roof, supported by a steel framework but not enclosed by walls. Usually more than one vessel is used as the still so that relatively continuous operations can be carried on for while one tub is being cleaned out and recharged, the second can be steam distilled.

Still Tubs.—In the Michigan-Indiana-Ohio region of peppermint oil production, the still tubs are made of 16-gauge galvanized sheet steel and are about 6-7 feet in

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diameter and about 6-9 feet tall. The tubs are equipped with a 1.5-inch pipe near the bottom of the vessel for the entry of the steam and with an exit port near the top, just under the cover. The exit port is several times the diameter of the entry port as a precaution against building up of back pressure in the still. The still cover is fastened down with clamps in a fashion similar to that of an autoclave and is made steam tight with the aid of a gasket. In the Northwest Washington Oregon area cement tubs are also used, while in other areas some use is made of stills equipped with a cover which can be sealed with a water seal. In these devices the condenser is attached to the cover rather than to the vessel thus permitting the cover to be swung to another still.

Condensers.—Worm type condensers are commonly employed. Some are cooled by running water over the pipes while others are immersed in a cooling tank. The hot condenser water is sometimes used in the steam generator with a consequent saving of fuel. A few tubular condensers, consisting of an upright metal shell containing about 24 upright 2-inch diameter iron pipes mounted like flues in a boiler, are also used.

Receivers.—The receivers are cylindrical drum-like vessels with a converging neck which vary in capacity from 10 to 50 gallons. They are equipped with a side pipe by means of which the level of water in the receiver can be raised thus permitting the oil to be forced out of a port at the top of the receiver.

DISTILLATION PROCESS

The peppermint herb must be packed in the still in such a manner that the steam will not channel through thus failing to effect distillation. It must also be packed in the stills in such a manner that the exhausted material can be removed with a minimum of effort. This is achieved by placing an iron ring to which chains are attached on the bottom of the still. The plant is then packed in until about the middle of the still. The steam is partially turned on and a second ring with chains is inserted, after which the loading is finished. The partial steaming assists in packing the plant thus preventing the channeling mentioned above. The two rings with the chains permit rapid removal of the herb after distillation is finished. After loading is complete, the cover is clamped on and the flow of steam is increased. When a

condensate begins to be collected in the receiver, the steam flow is adjusted so that none of the vapors are lost.

Usually the oil separates readily from the aqueous layer and may be withdrawn as a clear oil but some processors prefer to filter the oil. Most oils which undergo the distillation process briefly described above contain only a trace of dimethyl sulfide but as mentioned in a previous paper peppermint oils are sometimes redistilled.

The amount of steam used depends upon the moisture content of the peppermint herb charged into the still. It has been shown, for instance, that the higher the moisture content of the peppermint plant the higher the steam consumption. Thus air-dried peppermint needs about 30 to 50 pounds of steam per pound of oil, partially dried peppermint requires from 60 to 80 pounds of steam per pound of oil, whereas the fresh herb needs as much as 250 to 350 pounds of steam per pound of oil. The steam consumption is, however, greatly influenced by many engineering factors such as the type of still, the steam pressure, and the packing of the herb in the still.

OH VIELE

The yield of oil is greatly influenced by the geographical location. Thus the herb cannot be grown to yield adequate amounts of oil in many areas. In 1947, an acre in Oregon yielded 50 pounds, in Washington 47.5 pounds, in Indiana 31.0 pounds, in Michigan only 20 pounds whereas in most other areas very little oil is obtained. Seasonal and cultural conditions also have a marked effect on the oil yield. Thus in 1946, the yield in Oregon was 44 pounds per acre, in Washington it was 49, in Indiana 25, and in Michigan 19. Over the 10-year period from 1936 to 1945, the order of oil yield per acre was Washington 43.9, Oregon 41.5, California 41.0, Ohio 30.8, Michigan 26.0, and Indiana 25.1. These data are quoted by Sievers and Stevenson.

It was formerly considered that the concentration of the oil in the peppermint plant increased on drying, but as Guenther points out, the fallacy of this assumption was readily disclosed by experiment. Thus by distilling samples of fresh herb and samples of clover dry plant of the same batch and then recalculating to the fresh herb basis, it was shown that the fresh herb contains more oil. In some instances this was shown to be much more.

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Properties of Soap and Detergents

The structural and physio-chemical properties of soaps and detergents are discussed in this study by the U.S. National Bureau of Standards

E LECTRON microscope and X-ray diffraction studies of soap crystals, carried on at the National Bureau of Standards, have revealed characteristic features for each type of soap molecule that can be used for its identification and analysis. The electron microscope also indicates the individual soap forms that are present in a mixture, such as a commercial soap prepared from mixed fats or oils; this is not always possible with the X-ray spectrometer.

Although soaps and other kinds of cleaning materials have been in common use for centuries, there are no universally accepted quantitative methods for determining their washing or cleansing power. Considerable data are available in the literature on the structural and phase* behavior of pure alkali soaps in the solid state, as well as on the physio-chemical characteristics of their aqueous solutions. Soaps and the newer synthetic soapless detergents, however, are in many cases bought only on the basis of appearance and texture; the quantity of suds they produce; and, with some critical purchasers, their action on the skin and hands. The present investigation was conducted by Gopal S. Hattiangdi, in cooperation with members of the Surface Chemistry and the Constitution and Microstructure Laboratories at the National Bureau of Standards, to apply some of the newer scientific techniques to the problem.

Commercial soaps contain, for the most part, the sodium or potassium salts of the higher fatty acids. Small amounts of inorganic salts, organic compounds, and other additives may also be present to enhance some special property of the product. The synthetic detergents, on the other hand, are mostly soapless compounds obtained by the sulfonation, sulfation, or similar treatment of various types of organic molecules.

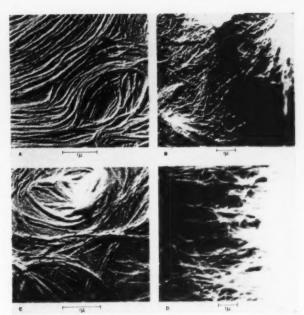
The differences in structural arrangements between soaps and between soap phases may be determined by examining surface details. Several previous investigators have used the polarizing microscope at about 200 to 400 magnifications as a valuable adjunct to visual observations. The electron microscope, with its high resolving power (approximately 100 A), has been used with considerable success in recent years to examine the surface details and structure of a variety of systems and, in conjunction with the metallic-shadowing technique, yields additional significant information. The approach to the present study by Hattiangdi and Max Swerdlow was to obtain first the morphological differences between several pure alkali soaps and then to examine the possibility of characterizing commercial soaps on the basis of these observations.1

The most characteristic feature of the electron micrographs for the pure soap is an interlocked mesh of fiber bundles of varying diameters and different degrees of twist but with a general tendency toward retaining both a criss-cross and a parallel structure. The diameters of the soap fibers depend upon the nature of the soap, concentration, rate of crystallization, and other factors. Consequently no measurements and interpretations in terms of absolute units were made. An attempt has been made, however, to represent schematically the growth of fibers and fiber bundles in terms of molecular packing. Packing of the soap molecules end to end, probably a minimum of ten, determines the "width" of the fibers. The association of the soap molecules in a direction per-

For further technical details see "Characterization of alkali soaps by ectron microscopy," by Gopal S. Hattiangdi and Max Swerdlow, J. Re-arch NBS 42, 343 (1949) RP1973.

Condensed from a technical report 1938, National Bureau of Standards, U.S. Department of Commerce.

A phase is defined as any portion of a system which is homogeneous throughout, which is bounded by a surface, and which may be mechanically separated from the other portions or phases.



Electron micrographs of soaps and soap mixtures reveal morphological features that serve as excellent guides for a quick characterization of the pure alkali soaps themselves (A and B) and for the identification of the components of commercial soap mixtures (C and D). (A) Sodium oleate (total magnification \times 20,000), (B) sodium palmitate (\times 11,000), Structure of sodium oleate in toilet soap (C) (\times 22,000), palmitate in toilet soap (D) (\times 11,000).

pendicular to the long axis of the soap molecules but in the plane of the hydrocarbon chains takes place almost indefinitely and results in the "length" of the soap fiber. The "height," or "thickness," of the fiber depends upon the number of soap molecules packed in a direction perpendicular to the plane of the carbon atoms but parallel to the long axis of the soap molecules.

Another outstanding characteristic revealed by the electron microscope is that each pure soap exhibits unique and distinct features, such as a curdy mass, an octopan mass, or filamentous, hairy, frond-like, or sheaflike formations. These are probably the result of a type of structural unit, such as a micellar grouping within the soap fibers, and are related to the mosaic structure of the crystal surfaces or to the crystal structure of the individual soap phases. Whatever the interpretation, these patterns serve as excellent guides for a quick characterization of the pure alkali soaps and for the identification of the components of commercial soaps of unknown composition. Thus, electron micrograph for the toilet soaps reveal distinct forms for both sodium palmitate and sodium oleate. The shaving soaps are characterized by forms typical of sodium palmitate. The laundry (washing) soaps exhibit forms that cannot be definitely identified with those for any of the pure soaps investigated.

X-ray diffraction patterns were also obtained² with a Geiger-Müller X-ray spectrometer in order to determine the molecular arrangemnts or phases present in commercial soaps. When a beam of X-rays is directed at a glancing angle against a soap surface most of it is reflected at the same angle, but a few rays are diffracted at other angles. The intensity of the diffracted X-rays as a function of the angle at which they occur depends upon

the manner in which the soap molecules are arranged. The impulses on the Geiger tube were transmitted to a strip-chart potentiometer so that the desired data were recorded automatically.

A crystalline soap phase, well developed in three dimensions (a, b, and c axes), exhibits a sharp, rather intense long spacing and several short spacings, which are well defined and lead to sharp peaks in the X-ray diffraction pattern. The sharpness of the long and short spacings observed for the various commercial soap patterns therefore indicates that they are all crystalline. X-ray diffraction data have also been used to identify the various phases present in the commercial soaps on the basis of published values of both the long and short spacings for numerous phases of pure sodium laurate, myristate, palmitate, stearate, and oleate. The approximate degree of hydration, based on water (moisture) content, has been computed for the various soaps.

TABLE I

riidses idelillilled ii	commercial soups as revealed by	A-ray andrysis		
Type of commercial soap	Phases	Degree of hydration		
Toilet	Mostly beta sodium palmitate; some omega sodium oleate.	moles of water 0.5 to 1		
Medicated	Same as above.	0.5 to 1		
Glycerin	Indefinite	Indefinite		
Coco	Omega sodium laurate and sodium myristate.	2		
Laundry (washing)	Omega phase; soap indefinite.	Indefinite		
Shaving	2 or more phases of sodium palmitate.	1		

The X-ray diffraction data can be further used to depict the nature of molecular packing in soap crystals. This may be stated briefly as being an end-to-end packing of the soap molecules, the perpendicular distance between two consecutive layers of the polar heads (containing the cation) being the observed value of the long spacing. The distance between hydrocarbon chains of the soap molecules is evidenced as the strong short spacing peak around 4.1 A. Shorter distances, such as those between carbon atoms in a given soap molecule, may be computed from the values of the relatively weak short spacings exhibted in the region of 2.5 A. The packing usually takes place with the soap molecules slightly tilted and the angle of tilt, β, can be determined because the true length of the molecules can be calculated from known values of bond angles, bond distances, and atomic radii. The value of β varies from soap to soap and also from one phase state to another.

Analyses by X-ray diffraction do not always distinguish the components of a binary system because first, a single value of the long spacing may be interpreted as being caused either by a single constituent or by an average of values for two or more distinct forms (two or more separate phases of the same soap or of different soaps); and, second, the short spacing values for two individual soaps or soap phases are unique, but when they are present together the peaks may overlap and their resolution becomes difficult and sometimes questionable. On the other hand, observations by electron microscopy are in excellent agreement with chemical analyses, and in such cases prove to be more rapid and accurate than X-ray diffraction techniques.

 "Characterization of some commercial soaps by X-ray diffraction," by Gopal S. Hattiangdi, J. Research NBS 42, 331 (1949) RP1972.

TABLE II
Physio-chemical properties of soap solutions

	Major constituents	Phase	Concentration == 2.5 percent soap				
Туре			Electrical conductance mhos/c.c x10-4	Surface tension dynes/cm	рН	Opacity Klett scale divisions	Rate of growth of foam Time in sec- onds per 100 divided rise
Toilet	Sodium palmitate Sodium oleate	Beta Omega	27.24	32.00	10.04	390	19
Medicated	Sodium palmitate Sodium oleate	Beta Omega	27.39	32.90	10.07	200	23
Glycerin	Indefinite						
Coco	Sodium laurate	Omega	31.06	34.35	10.00	190	19
	Sodium myristate	Omega	27.30	28.45	9.17	2	19
Laundry (Washing)	Indefinite		43.48	33.04	10.16	46	20
Shaving	Sodium palmitate	2 or more	28.12	34.20	10.04	660	30

As a third phase of this investigation, the physiochemical properties of solutions of commercial soaps and detergent materials were examined in cooperation with W. W. Walton and J. I. Hoffman for the purpose of interrelating the colloid-chemical nature of the solutions to the phase nature of the solids.3 Hence, data were obtained on the electrical conductivity, surface tension, pH, opacity, and rate of growth of foam, of aqueous solutions of numerous soaps and detergent materials. Some qualitative observations were also made on the physical behavior of the soaps. Thus, the hardness of the soaps, as observed arbitrarily, decreases in the order toilet-medicated-laundry-shaving, whereas the percentage of soap rubbed off the sake (bar) in use in water is, qualitatively, shaving-toilet-laundry. On standing in water, the toilet and shaving soaps swell and disintegrate, whereas the laundry soaps crack somewhat with little or no swelling.

In most cases, there is no great difference in the value of any of the physio-chemical properties for products in any given type of soap as for example, toilet, coco, or glycerin. X-ray diffraction data and observations by electron microscopy indicates further that the molecular arrangements and surface features (phase nature) of these products are very similar. A correlation between the two thus seems reasonable but has not been attempted quantitatively in the present investigation, mainly for lack-of specific details regarding the composition of the products and the various mechanical, thermal, and other treatments received during the manufacturing process.

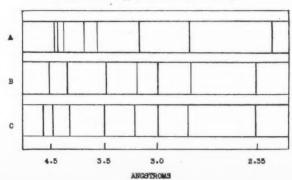
On plotting the values for each property against the soap content in various solutions, discontinuities are obtained in otherwise smooth and regular curves. The discontinuities occur in two general regions, at approximately 0.1 to 0.2 per cent and 2 to 2.5 per cent of soap. That in the lower concentration is brought about by the formation of a single layer of the soap molecules on the surface, whereas that in the higher region indicates the formation of soap micelles (ionic micelles) with single or multiple charges. The almost steady values of conductivity and surface tension obtained beyond this higher concentration indicate that both the surface and the interior of the system are saturated with respect to the charged micelles.

The synthetic detergents, on the other hand, are characterized by their ready solubility in cold water. Solutions of these materials may be either acidic or alkaline and have an almost constant value of conductivity and surface tension at high concentrations, and extremely low and constant values of opacity at lower concentrations.

On the basis of colloid-chemical concepts, an efficient cleansing compound should have a low surface tension, a relatively high electrical charge, and ability to form colloidal micelles at low concentration, a property that facilitates solubization. When the physio-chemical data for solutions of soaps and synthetic detergent materials are considered together, it is seen that greater surface activity and an optimum degree of micelle formation, both in number and in size, are obtained with diluted solutions of synthetic detergents and concentrated solutions of the soaps. Consequently, cleansing should be achieved better and more economically by using soap solutions of relatively high concentrations and synthetic detergent solutions in the lower concentration region.

The short spacings for the commercial soap (C) are comprised essentially of the strong lines for the individual pure soaps, and the pattern resembles one to be expected from superposition of those for the pure sodium palmitate (A) and pure sodium oleate (B). The single long-spacing for the toilet soap, not indicated in this figure, is intermediate between the values for the two pure soaps but is more closely related to the palmitate.

X-ray diffraction short-spacing lines for pure sodium palmitate, sodium oleate, and a typical commercial toilet soap



 [&]quot;Some physical chemical properties of aqueous solutions of soaps and soapless detergents," by Gopal S. Hattiangdi, William W. Walton, and James I. Hoffman. J. Research NBS 42, 361 (1949) RP1974.



by ARNOLD KRUCKMAN

R ECENT announcements of new allocations of ECA funds for expenditure by Europeans for essential oils, brought from Robert Tyson, chief of the Commodities Branch of the ECA, the interesting statement, that between April 3d, 1948 and July 31st, 1949, a total of three million 31 thousand dollars in procurement authorizations have been issued to France, Bi-Zone Germany, Ireland, the Netherlands, and the United Kingdom. The essential oils purchased with the ECA money were procured in the United States, Latin America, China and Japan. Citrus oils, which include lemon oil, grapefruit oil and orange oil; as well as mint oil, which includes peppermint, spearmint, wintergreen, sweet birch, cedar leaf and cedar wood oils were not acceptable for ECA financing unless purchased in the United States. The only citrus oil that may be bought outside of the United States is lime oil.

It is interesting to note that France purchased \$420,000 worth of essential oils in the United States and \$80,000 worth in Latin America; Bi-Zone Germany purchased \$175,000 worth in the United States, \$398,000 worth in Latin America, \$23,000 worth in China; Ireland bought \$300,000 worth of oils in the United States; the Netherlands procured \$1,422,000 worth of essential oils in the United States, \$190,00 worth in Latin America, \$37,000 worth in Japan and \$19,000 worth in China, the United Kingdom bought \$264,000 worth in the United States. The types of oils are not indicated in the report by ECA.

The most recent authorization in the case of the Netherlands showed that for the third quarter of 1949, in one instance, the industries in that country were given \$10,000 to purchase approximately 3 metric tons of the oils, which came from Japan. Another authorization for the Netherlands reported early in August authorized \$150,000 based on an estimate of 30 metric tons to be spent in the United States and its possessions. A third authorization of \$10,000 is based on the procurement of approximately 2 metric tons.

Another early August announcement authorized the

French to purchase \$50,000 worth of essential oils based on approximately 10 metric tons in the United States and its possessions. The French procurement runs over the period which ends for delivery by January 1, 1950. The United Kingdom interests were ordered to decrease their previous authorization for \$750,000 for essential oils by the sum of \$486,000, leaving them with a current total of \$264,000, which is based on an estimate of 17 metric tons. For the second quarter of 1949 the Netherlands people also were authorized to use \$4,000 to acquire essential oils to the approximate extent of 2 metric tons.

As an example of what the essential oils business means to the Netherlands, it is interesting to know that the most recent report coming from the Department of Commerce shows that the total purchases of essential oils by the Netherlanders reached an annual dollar volume of 2 million 900 thousand dollars, of which 1,600,-000 dollars was purchased in the United States. These essential oils were converted into manufactured goods having a total value of \$10,200,000, of which \$6,800,000 worth of articles were directly exported. Of the \$3,400,-000 balance there were other goods which unquestionably also included a considerable volume of goods such as chocolate, liqueurs, which were exported. The essential oil industry is more important than size alone indicates, because value by manufacture runs 250 per cent. Strong efforts are being made to switch procurement to other sources than the United States but certain necessary grades and qualities are available only from the United States. It is, of course, obvious what is true of the circumstances in the Netherlands also applies to France, Belgium, United Kingdom and other ECA clients who buy and manufacture products of essential oils.

BRAZIL CHANGES IMPORT REGULATIONS

Brazil also has made changes in its import regulations, that will particularly affect hard currency countries. The importers, beginning August 10th, are required to submit licensed applications covering proposed imports for a three months period. The list of items which now may be imported has been substantially reduced. It may be had from the Department of Commerce offices, wherever they are located. Absent from the "admissible imports" list are items, some of which enter into cosmetics and perfumes, as well as wheat, wheat flour, automobiles, trucks, and a large list of finished consumer goods and numerous other commodities.

The Department of Agriculture reports that supplies of citrus fruits, coming mostly from California will con-

tinue short, mainly because of freeze damage to the crops last Winter. Supplies of lemons late in July were only about half those a year earlier, and are expected to be very short by the end of Summer. This reduction has stimulated greatly increased imports from Italy. Through July these imports were more than double the comparable imports in the preceding season.

American chewing gum is obviously very popular abroad. Exports last year exceeded 11 million pounds according to the Office of International Trade, Department of Commerce. The increase was 11.8 per cent in volume over the chewing gum exports of 1947, and are four times greater than the average yearly foreign shipment during the pre-war period of 1935-39. The soldiers and sailors who went abroad during World War II are credited with popularizing chewing gum. Foreign manufacturers have not yet been able to duplicate the quality of the American product or to produce chewing gum in quantity. It is estimated that over 95 per cent of the entire world's output of chewing gum is made in the United States.

ESSENTIAL OIL PRODUCTION

The Department of Commerce reports that Honduras exported 60,000 pounds of citronella oil in 1948. During the war, 800 acres were planted to citronella grass, the oil brought \$4 per pound in the United States. Currant planting has dropped to 457 acres and the price has fallen to \$1 and \$1.13 per pound. The Department of Commerce also reports that the extraction of oil from lemon grass is growing into an industry of considerable importance in South India. Lemon grass is the monopoly of the West Coast of Madras Province. Something between 20 thousand and 25 thousand acres are under cultivation. Export price of lemon grass oil, C and F, New York, range between \$1.01 and \$1.45 per pound. The present production of lemon grass oil is estimated at 300 long tons. The 1949 rose crop in Bulgaria is reported to be average. The quantity and quality of the rose oil, according to the Department of Commerce, was improved by the frequent rain falls in April and May.

From Italian Somaliland, the Department of Commerce has a report that the exports of ambergris during 1948 had a value of 3,432 shillings. There also were large exports of myrrh and aromatic woods. From the same place, there were exports of arabic gum valued at \$15,000. During March, Japan reported the production of 123 metric tons of crude camphor. The production of camphor oil and refined camphor was 154 tons and 65 tons respectively. From Taiwan during the first six months of 1949 came 102 thousand and 28 pounds of citronella oil, 17 thousand 637 pounds camphor oil and 19,432 pounds sassafras oil. From Liberia, the Department of Commerce received word that exports of kola nuts during 1948-49 had a value of 50,788 dollars. Most of the kola nuts go to French West Africa. The native chew kola when on long journeys and are stimulated so they can go great distances without food and with little fatigue. Kola is bitter in taste. Australia sends word that it can supply oil of lemon and oil of orange but it does not have oil of lime. Reunion Island exported, during April this year, 15 tons geranium oil, 4 tons vetiver and 4 tons ylang ylang. For the first time since the war, the famous Hungarian lavender fields in Tihany were replanted this year. They yielded several cargos of the product, and lavender oil was distilled with the aid of a primitive steam still. The production of the famous Hungarian lavender oil is to be resumed as of old.

Brazil during the first quarter of 1949, from the Amazon region, sent us 115,891 pounds of rosewood oil valued at \$260,284. Canda last year bought from us \$21,803 worth of perfumes and toiletries. The Department of Commerce has reports from the island of Cyprus that a new distillation plant has been built at Limassol where locally grown English lavender, Rosemary, roses, aniseed, coriander, cumin and bigarade as well as cassie will be distilled. The chief activities at the place will be to distill essential oils; manufacture perfumery and to make flavors.

Jamaica, in the British West Indies, exported last year 83,103 pounds of essential oils. They included lime, lemon, pimento, orange, and grapefruit. The lemon crop is small and production of oil limited. Lime oil is plentiful and more could be processed if the market were greater. There is a plentiful supply of pimento leaf oil.

New regulations promulgated by Army and Air Force Post Exchanges and Ships Service Stores require that Commissary Stores located where commercial facilities are convenient at reasonable prices must be closed not later than January 1, 1950. The regulation also requires the collection of the federal excise tax beginning August 1, 1949. The list of items to be sold in the future have been considerably curtailed. The entire method of doing business has been tightened up.

OVERTIME PREMIUMS

In the light of the amendment to the wage and hour law adopted by the House July 20th, 1949, the Administrator of the wage and hour division points out that overtime premiums in the future include those paid for work on Saturdays, Sundays, holidays, the sixth or seventh day of the work week, and for hours outside of the basic, normal, or regular work day (not over eight hours), or work week (not over forty hours). The Administrator cites the test which must be met as a condition under which these premiums may be excluded from an employee's "regular rate" of pay and may be credited toward overtime compensation which may be due him under the Wage and Hour Law for work after 40 hours in a work week.

The terms of the amendment apply retroactively to all industries, and are applicable in "rotating shifts" under which an employee has a bona fide basic, normal or regular work week, although his days of rest may fall on different days of the week, depending on the shift he is working. The details of the Administrator's statement known as D-224 is available at any Department of Labor Office. The minimum wage and hour Act was amended in August by the House raising the minimum from 40 cents to 75 cents an hour.

House Majority Leader McCormack (D.—Mass.) after visiting the President told a press conference he saw no prospect of any repeal of any war-time excise taxes at this session. McCormack stressed that everybody is for repeal but that the influence of the White House will probably prevent any action at this time.

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Hints for Improving Production

Equipment for moving materials and new packaging machinery to be featured at Industrial Packaging and Materials Handling Exposition in Detroit, October 4, 5 and 6... New and Improved Equipment

COMPLETE showing of all types of equipment for the movement of materials in plants and warehouses as well as a number of new stationary units employed specifically for packaging processes will be made at the Industrial Packaging and Materials Handling Exposition in Detroit, October 4, 5 and 6, according to an announcement from the management. In addition, a number of new developments in protective packaging will be revealed and new construction of corrugated boxes making possible heavier loads with complete protective safety will be shown. Over 70 manufacturers will have exhibits.

The exposition is held in conjunction with the Wayne University Material Handling Institute's short course which will include 16 discussion sessions, seminars and panels. All who desire to attend the Institute and Exposition should write to the Society of Industrial Packaging and Materials Handling Engineers, 20 West Jackson Blvd., Chicago, 4, Ill. All events are open to members and non-members.

Spring Balanced Drum Truck

Barrels and drums up to 1000 lbs. are handled readily by the Thomas spring balanced drum truck according to the Thomas Truck & Caster Co. A coil spring is installed in a steel housing to give faster action when breaking over a load and permits the truck to stand upright when not in use. Pressure with the foot and an easy pull on the handle, it is pointed out, automatically loads the truck without raising it from the floor. The curved handle-

bar is equipped with rubber grips and a choice is offered for rubber tired or semi-steel wheels.

Light Floor to Floor Conveyor

Light loads may readily be moved up or down from floor to floor with the light-medium duty stationary belt booster, according to the Island Equipment Corp. Applications include floor to floor, table to floor above or table to overhead system. The makers describe it as a packaged power unit containing its own take-up and point out that it is adaptable to drive at either end or at any point along the incline, depending on the installation. The frame is of pressed steel and standard belt widths include 10, 12, 14, 16, 18, 24 and 36 in.

New Flexible Abrasive

A new abrasive in stick form which is used like an eraser for cleaning and polishing copper, brass, bronze, aluminum and other metals is offered by Ideal Industries Inc. It is said to be useful in removing tool marks, scratches or rust, leaving a highly polished finish on brass and other metals. The new flexible abrasive is made in five sizes easily held in the hand.

Painting Maintenance Costs

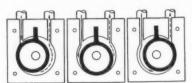
For out of the ordinary painting problems, particularly those involving acids, alkalis, oil and water, a Prufcoat Proof Packet giving information about the use and specification of Prufcoat protective coatings has been prepared for distribution by Prufcoat Laboratories Inc. It contains reports from outside testing laboratories, case histories, the Prufcoat plan for analyzing painting maintenance costs, a price list and catalog information. Copies are sent on request.

Heat Exchangers

For heating or cooling corrosive fluids, particularly in tanks with liquid depths up to 16 in., the Karbate impervious graphite heat exchanger style FH, size 1½ is offered by the National Carbon Co. Larger units are also available.

Pump for Corrosive Liquids

The new non-corrosive flex-i-liner pump in which the transferred liquid never touches any of the metal parts is especially suitable for handling corrosive liquids such as acids, alkalis and industrial alcohols, according to the Vanton Pump Co. The construction of the pump is such that the fluid flows on the outside of the flex-i-liner and on the inside of the body block. The flex-iliner material may be specified in either pure gum or synthetic rubber and the body block may be had in plastic or hard rubber. The unit is small and compact.



Flex-i-liner is actuated by a rotor on an eccentric shaft creating a squeegee pressure action and resulting in a positive displacement of the fluid being used in the unit.

Foamglas Insulation

For overcoming operating problems in manufacturing where high humidity is a factor, sandwich walls, consisting of a layer of Foamglas insulation held between two layers of concrete made in panel form are offered by the Pittsburgh Corning Corp. Foamglas is composed of millions of tiny glass cells or bubbles filled with sealed in air. A brochure with photographs containing details and data on typical concretecellular glass curtain wall jobs is available on request.

Gas Fired Stoves

A new gas fired stove for use in industrial applications is offered by the G. S. Blodgett Co., Inc. It is two feet high, square, has a streamlined body of steel; a two-ring and lid 22½ in. square; a three ring burner with more than 400 burner port tips; a stainless steel heat distributor; a constant burning pilot and adjustable legs. Parts are easily removed, it is pointed out, to facilitate cleaning.

Fabric Dust Hoods

Loose fitting, 5 ounce fabric dust hoods providing visibility through large plastic windows are offered for use in powder making rooms and whatever else it is desirable to protect the worker from irritating and nuisance dusts or sprays. The fabric, supported by a head frame, is made to cover and protect the face, head



Light Weight Dust Hood

and neck down to the shoulders. The General Scientific Equipment Co. which makes them states that the price is \$2.50 each and subject to quantity discounts.

Small Vacuum Oven

A small, low cost vacuum oven for use in small laboratories is announced by the National Appliance Co. Shelf space is 4 in. wide, 7 in. long and 5 in. high. It is said to do the same work as the standard sized vacuum oven but with even more sensitive thermostat controls. Black heat heating elements are featured, and it is added that uniform temperature is assured by a new design in placing an air cock on each side to provide a cross flow of dried air thereby removing moisture rapidly and completely.

Fully Automatic Screw Capper

A new single head fully automatic screw capper equipped with an individual motor drive and larger cap pick-up dial for easy and quick feeding of caps at a constant rate is offered by the Tite Cap Machine Co. The new design, it is stated, makes is easy for users to install rotating transfer disks at either intake or discharge end for handling odd shaped containers or for operating the capper at right angles to other bottling equipment to save space.

New Gravity Filler

For filling materials and containers that cannot be handled by either vacuum or pressure the MRM 5-G gravity filling machine is offered by the MRM Co. It is stated that it will handle all sizes of containers having a 3/8 in. mouth opening and offers a full adjustability from small size containers to one gallon.

Adjustable Speed Motors

Alternating current variable speed drive motors which are stated to be especially suitable for driving such equipment as conveyors and any other variable speed machine requiring constant torque input throughout the operating speed range are described in a 20-page catalog issued by the Louis Allis Co. Continuous duty speed ranges as high as ten to one are possible in the smaller sizes, it is stated.

Metal Stacking Boxes

For handling and storing medium loads, a new stacking box especially designed for the purpose is offered



New Stacking Box

by Bay, Inc. The box, in sizes 10x16x 6 in. to 10x20x8 in., is supplied in 16 and 18 gauge steel. Its features, the company points out, are: Continuous stacking rim on all four sides, reinforced corners, spotwelded construction, four rivets for extra strength and a drop handle at each end. The continuous stacking rim is provided to assure maximum rigidity when stacked.

Viscosity Determinations

Whenever product quality is directly a function of viscosity and whenever the end product depends for its quality on maintaining a definite viscosity of an ingredient, the Brookfield synchroelectric viscometer will be found to be thoroughly reliable, according to the Brookfield Engineering Laboratories. The instrument is compact, weighs 31/9 lbs. and is self contained. It requires only convenient electrical outlets to permit intermittent control operations in various locations. With it, it is claimed, accurate viscosity determinations are made with sliderule speed. It is available in four models adaptable to practically all viscosity problems. Moreover, it is stated, it is simple to handle, clean and maintain. Literature describing it in detail will be sent on request.

Storing Essential Oils

When shipped in metal containers and kept in them from six months to a year many essential oils such as clove oil, eugenol and isoeugenol, tend to darken in color. For that reason it is advisable to transfer such oils to carboys or glass lined tanks, as soon after receipt as is possible.

New products and processes

New Stabilizers

New food and cosmetic stabilizers, dehydroacetic acid and its sodium salt have been investigated by Dow Chemical Co., Midland, Mich., and have proved successful in limited field tests for a number of products. They are trademarked DHA and DHA-S.

Laboratory tests and field trials of these compounds show considerable promise in inhibiting bacteria, fungi, and yeasts that are commonly encountered in the manufacture and processing of cosmetics such as hand lotions, food and food packaging machinery, and beverages.

These products are said to have been found to be neither primary skin irritants nor skin sensitizers. Extensive toxicity studies on animals and humans indicate that their use may be feasible in certain food applications.

Non-Ionic Detergents

Two new, non-ionic synthetic detergents, Antarox A-400 and Antarox A-480, have been introduced by Antara Products, General Aniline & Film Corp.

The two compounds are said to be extremely stable in the presence of acids, alkalis and electrolytes. Because they do not ionize, they will not form insoluble compounds in hard water. They do not easily decompose or separate. The new Antaroxes are foamers. They withstand long storage and wide variations in temperature.

New Adhesive

National Adhesives is offering Impervo 44, an adhesive for automatic equipment for labeling glass containers under U.S. Federal Specification U-M-186. Best results are stated to be obtained when machines are adjusted to apply a minimum film, thus avoiding smearing. As the adhesive sets rapidly, labeled

containers can be nested immediately without suffering from label scuffing or slippage.

Display Sign

After two years of development and testing, a double-faced, movingmessage electric display sign has been placed in production by Baldwin Electric Co.

Both moving film and still sign



New display sign

displays, illuminated and in color, are contained on each face of the sign, a feature of particular usefulness when displays are placed in store aisles or windows.

The sign is of compact and easily accessible construction, with sealed in unit mechanism. The standard model is 8 x 24 inches and 3½ inches deep. The standard model may be obtained in a variety of colors and finishes, or special models may be obtained. Complete signs in the regular models are priced at \$26.57 to \$50.00, depending upon quantity.

New Catalogs

The first issue of the "D&O News" is off the press. Published by Dodge & Olcott, Inc., New York, N.Y., the "D&O News" is a brochure of diversified interest, containing articles that deal with vari-

ous problems pertinent to the trade, and news items on current topics that effect the industry. It is unusually informative and carries an air of authority.

The feature article of the first issue is headed Bombs With a Secure Future, and describes the wide opportunity that exists for Aerosols. Another, entitled China Cargo, gives a picture of political unrest in China and its effect upon imports from that country. Other articles deal with Ammoniated Dentifrices, Vanilla Concentrates, etc.

Arthur Dowling is editor of the "D&O News," and together with Mr. Randolph, the president, is responsible for launching this new service.

The Chemical Division of Koppers Co. has issued a 24-page technical bulletin describing the physical and chemical properties of monotert-butyl-meta-cresol. A light-colored liquid alkylated phenol, which solidifies slightly below room temperature, MBMC closely resembles thymol. Its high phenol coefficient makes it valuable as a germicide and as a preservative for protein and other materials attacked by bacteria and fungi. MBMC is valuable as a raw material for the production of musk ambrette and as a modifying agent in the preparation of synthetic resins. Copies will be sent upon request.

George Lueders & Co., New York, N.Y., has issued a new wholesale price list. Copies will be mailed upon request.

The Association of Consulting Chemists and Chemical Engineers, Inc., New York, N.Y., has issued the 12th edition of its Classified Directory under the title Consulting Services. The directory has been enlarged to 132 pages. Requests for the book must be addressed to the Association, giving source of reference, name of person and his company in full, and complete address.

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CONDENSED CHEMICAL DICTIONARY. Compiled and edited by the Editorial Staff of the Chemical Engineering Catalog, under the editorial direction of Francis M. Turner. Lists 18,000 chemicals and their synonyms, formulas, colors, properties, constants, specific gravities, melting and boiling points, solubility in water, ether and other solvents, preparation and ingredients, with process—indispensable for all who have occasion to work with chemical products or raw materials. 756 pp. \$12.00 postpaid.

THE ESSENTIAL OILS, VOL. I. By Ernest Guenther. Covers (1) The Origin and Development of the Essential Oil Industry; (2) The Chemistry and Function of Essential Oils in Plant Life; (3) The Products of Essential Oils: Methods of Distillation, Enfleurage, Maceration and Extraction with Volatile Solvents: (a) Distillation of Essential Oils, (b) Natural Flower Oils, (c) Concentrated, Terpenless and Sesquiterpenless Oils, (4) The Examination and Analysis of Essential Oils, Synthetics and Isolates. Indispensable for up-to-date information on the chemistry, production, and analysis of essential oils. 448 pp. \$6.00 postpaid.

THE ESSENTIAL OILS, VOL. II. By Ernest Guenther. Just off the press. This second volume gives data on several hundred of the more important constituents of essential oils. Describes the structural formulas, occurrence, methods of isolation and identification, the physico-chemical properties of these compounds. Essential oil constituents grouped according to the class of compound to which they belong: Hydrocarbons, Alcohols, Esters, Kezones, Lactones, etc. Maison G. De Navarre says: "In no other work is the treatment of essential oil constituents so complete and up-to-date." 852 pages, illustrated and indexed. \$10.00 postpaid.

SYNTHETIC FOOD ADJUNCTS. By Morris B. Jacobs, Senior Chemist, Chief of the Chemical Bureau of Foods & Drugs, Dept. of Health, City of New York. Comprehensive handbook of information needed to make and use the colors, flavors and other synthetic adjuncts employed in the food industries. Full directions for their mixing, blending and formulation from the many hundreds of individual chemical compounds that enter into food production—including flavoring substances, coloring matters, vitamins, vitagens, preservatives, antioxidants, stabilizers, emulsifiers, etc. 335 pages. \$5.50 postpaid.

THE CHEMISTRY AND MANUFACTURE OF COSMETICS. By Maison G. Navarre. A new kind of cosmetic book—that points the surest way to success in making any product and undertaking any problems. Everyone of its hundreds of formulas—for cosmetics of all types and all purposes—has been produced, tested, and proved to work in the author's own laboratory. 745 pages. \$9.00 postpaid.

THE LAW OF FOODS, DRUGS & COSMETICS. By Harry A. Toulmin, Ir. Working manual of Official Government Regulations, FDA Trade Correspondence Rulings, Official Forms and Charts. Thorough analysis of the decisions relating to: False and Misleading Advertising, Unfair Competition and Misbranding, Informative Labeling. One large volume, 1460 pp. (Will be kept up-to-date with pocket supplements for modest additional charge). \$17.50 postpaid.

PERFUMES, COSMETICS and SOAPS. By William A. Poucher.

VOL. I-DICTIONARY. Every substance used in the manufacture of perfumes and cosmetics fully described. Vol. I puts at

your command wide new resources for developing new products, and for effecting economies and improvements by choosing the best of all available materials. 440 pp. \$8.00 postpaid.

VOL. II—PRODUCTION, MANUFACTURE AND APPLICATION OF PERFUMES OF ALL TYPES. New edition covers in full the methods of production of perfumes, their chemistry, odor analysis, selection for various purposes, and compounding from various materials. Complete monographs explain all the floral perfumes, giving the botanical varieties, the odor classification, the chemical composition, practical suggestions for compounding, and the best ingredients. Additional chapters give many new formulas for fancy perfumes and toilet waters. 426 pp. \$8.00 postpaid.

VOL. III—TREATISE ON COSMETICS. The best of present-day cosmetics explaining in detail how to prepare them from commonly available materials by easily applied methods. Shows how to vary perfumes and colors to obtain any desired result; warns against specific causes of defective products. Each chapter covers the many varieties of a type of cosmetics, and is loaded with representative formulae. The most comprehensive book now available on cosmetics—indispensable to everyone in the field. 288 pp. \$7.00 postpaid.

MODERN COSMETICOLOGY. By Ralph G. Harry. Partial contents: Emulsions, Cleaning Creams, Milks and Lotions. Acid Creams, Face Packs and Masks, Mud Creams, Vanishing Creams, Powder Creams. Lubricating Creams. Astringents and Skin Tonics. Lipstick. Make-up. Face Powders. Sunburn and Suntan Preparations. Deodorants. Depilatories. Antitoxidants. Bath Preparations. Bath Oils and Emulsions. Foam Baths. Hand Creams and Lotions. Dental Preparations. Mouthwashes. Shaving Preparations. Hair Tonics and Lotions. Hair Creams and Fixatives. Permanent Waving Solutions. Hair Setting Lotions and Hair Lacquers. Hair Shampoos and Soapless Detergents. Manicure Preparations. Eye Lotions. Baby Preparations. Foot Preparations. Insect-Bite Preparations. Humectants. Acne Preparations. Coloring of Cosmetic and Toilet Preparations. 514 pp. \$12.00 postpaid.

MODERN COSMETICS. By E. G. Thomssen. Contents: Cosmetic Classification, Face Powder, Creams, Lotions, Deodorants, Bath Preparations, Make-up Preparations, Rouges, Eye Preparations, Lipsticks, Suntan Preparations, Hair Preparations, Hair Waving Preparations, Shaving Media, Dentifrices, Miscellaneous Cosmetics, Perfumes, Machinery and Equipment for Cosmetics, Packaging Equipment and Factory Layout. 644 pp. \$8.00 postpaid.

NATURAL PERFUME MATERIALS. By Y. R. Naves and G. Mazuyer. Describes the raw materials used in the extraction, choice, purification and recovery of volatile solvents; the preparation of tinctures and infusions; the treatment of concretes; resins and balsams; the extraction of the aromas of fruits and distilled flower waters; the manufacture of pomade and perfumed oils by the use of vegetable and animal fats and mineral oils, properly chosen and prepared; the processes of digestion and enfleurage on solid and liquid absorbents; and the extraction of decolorized absolutes and pomades from the diffused products. Contains much information on the chemical composition and analytical examination of extraction products; descriptions of plant and raw materials subjected to extraction. 355 pp. \$6.75 postpaid.

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THE ROUND TABLE -

D & O And DeLaire Form New York DeLaire Division

Dodge & Olcott, Inc., New York, N.Y., and Fabriques DeLaire of Paris, original French manufacturers of aromatics and perfume specialties, have jointly announced the formation of the DeLaire Division of the New York concern to facilitate the introduction of new perfume styles in the American toiletry goods industry.

It has been announced that Henri Robert, prominent perfumer of both New York and Paris, has been appointed director of the division. Mr. Robert also was named director of the DeLaire Research Laboratories in Paris

tories in Paris.

Dodge & Olcott, Inc., a subsidiary of U.S. Industrial Chemicals, Inc., and one of America's oldest business concerns, has represented Fabriques DeLaire in this country for over 50

years.

Complete new laboratory facilities have been built by Dodge & Olcott, Inc., for the new division, and Mr. Robert has installed his perfume library, containing several thousand vials of perfume ingredients, which is believed to be the largest in the world. The DeLaire laboratories in Paris will supplement the laboratory activities in this country.

Born and reared in the perfume raw materials industry, Mr. Robert spent his early years in Grasse, France, working under the direction of his father, Joseph Robert, a pioneer in the natural perfume industry. It was Joseph Robert, with Massignon, who more than 50 years ago created the volatile solvents process for the extraction of perfume from flowers and plants. This process is still employed by important manufacturers of the valuable absolutes of jasmin, rose, fleur d'oranger and others.

Henri Robert subsequently be-

came associated with some of larger Parisian perfumery houses for whom he created many of today's world famous perfumes.

Dodge & Olcott management re-



Henri Robert

vealed that the formation of the division makes available a most complete range of materials and services.

Committee Formed on Manicure Preparations

A new committee has been formed to study the marketing of manicure preparations, especially nail enamels. A chairman of the committee has not yet been appointed.

Felton Improves Service

Louis Gampert, vice-president of Felton Chemical Co., Brooklyn, N.Y., has announced the appointment of James Leonard to represent the company in the state of Texas and West Louisiana. The address of the new outlet is 1207 S. Industrial St., Dallas, Texas. Stocks will be carried there to better serve the territory.

David Marso has been transferred from Brooklyn to Atlanta, Ga. From there he will cover the Southeastern states. Leo Weinrobe, with headquarters in St. Louis, will continue to serve Missouri, Kansas, Oklahoma and Arkansas, and act in a supervisory capacity for the entire Southern territory.

Fragrance Foundation In New Office

The Fragrance Foundation is now located in Room 517, 60 East 42 St., New York 17, N.Y. The telephone number is Murray Hill 2-0178. Miriam Gibson French, Coordinator of the Foundation, may be found at the above address.

Firmenich Buys Carameed, Ltd.

The firm of Carameed, Ltd., 350 Wallace Ave., Toronto, Canada, has been purchased by Firmenich & Co., according to Charles C. Bryan, resident partner of the latter company.

The new subsidiary will handle all distribution in the Canadian market of the Firmenich and Chuit-Naef line of perfume and flavoring materials.

Mr. Bryan has been elected president of Carameed, Ltd., and Gavin L. Creed, of Toronto, vice-president. Ernest J. Arn will be in charge of sales under the reorganization.

Smith & Scott Opens New York Office

Smith & Scott, Ltd., Bermuda, proprietors of LiLi perfumes, announce the opening of a branch at 333 West 52 St., New York, N.Y. The New York corporation operates under the name Smith & Scott Ltd. of New York and is the exclusive representative for the parent organization in the United States. LiLi perfumes are made, packaged and sealed in Bermuda.



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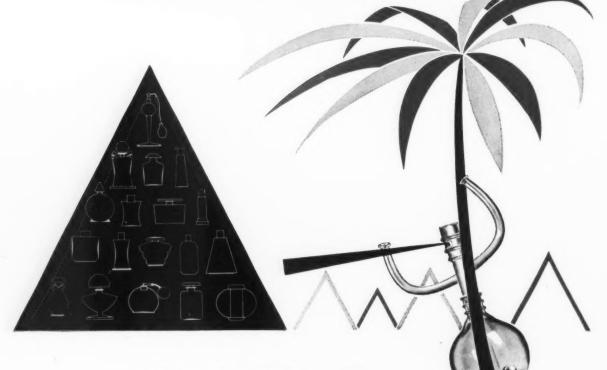
The delightful Springtime fragrance of the orange flower in bloom, one of the basic notes of floral perfumery, is captured by Fleurs d'Oranger No. 1401. For orange blossom, narcissus and jonquil, an exquisite character is blended around this specialty . . . as a contributor to a floral base, it finds remarkable use in acacia, sweet pea, mignonette, hyacinth, honeysuckle.

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ESSENTIAL OILS - AROMATIC CHEMICALS - PERFUME BASES - VANILLA - FLAVOR BASES

NWDA Annual Meeting Scheduled for October

The 1949 Annual Meeting of the National Wholesale Druggists Association will be held at the Ambassador and Ritz hotels, Atlantic City, N.J., October 8-13.

Dow Chemical Announces Personnel Changes

L. A. Chicester has retired as assistant secretary and general credit manager of the Dow Chemical Co., Midland, Mich. Concurrently, Carl A. Gerstacker, treasurer, announced the appointment of Robert B. Bennett to fill the position of general credit manager.

N.V.Chemische Fabriek "Naarden" Opens Branch

The N.V.Chemische Fabriek "Naarden" of Naarden, Holland, has opened a branch in Oslo, Norway, under the name Norsk A/S Naarden. "Naarden" now has six branches. They are: Naarden-Batabia (Batavia), Belge-Naarden

(Brussels), Naarden-India (Bombay), Naarden-Aromaticos (Buenos Aires), Norsk-Naarden, and Nordiska-Naarden (Stockholm).

At the last meeting of the shareholders, W. A. van Dorp, Jr., was appointed managing director. J. Th. Schoenmakers is assistant director of the parent Dutch company.

Detroit Packaging Show Slated for October

The Fourth Annual Packaging and Materials Handling Exposition is to be held October 4-6, at Convention Hall, Detroit, Mich.

The Exposition includes cooperation by Wayne University where sixteen discussion sessions, lecture sessions, and panels, scheduled October 3-7, will be held.

New England Alcohol Becomes Nealco-Monsanto

The name of the New England Alcohol Co., Everett, Mass., partially owned subsidiary of Monsanto Chemical Co., has been changed to Nealco-Monsanto Co.



J. F. Rudolph, president of Dodge & Olcott, Inc., New York, N.Y., on a four-week business trip in Europe, visited Paris for ten days to complete plans for the new DeLaire Division of Dodge & Olcott, Inc. Photographed at the Fabriques DeLaire in Issy, a suburb of Paris, are from left to right, Jean DeLaire, J. F. Rudolph, Henri Robert, director of the DeLaire Division of D&O, and Francois DeLaire, director general of the Fabriques DeLaire. Mr. Rudolph returned via plane at the end of August. Mr. Robert returns this month.

Pierre Harang, Tennis Victor

Pierre Harang, vice president of Houbigant, a member of the National Lawn Tennis Association, Veterans' Team, has just returned from Montebello, Quebec after having participated in the first international match with Canada. The U.S. team won. Mr. Harang, with Mel Gallagher, who is national doubles champion, won 6-3, 6-2, against Canada's number one team, Allen McMartin and Harry Spencer. Matches were held at the Seignory Club in Montebello. Mr. Harang again participated in Forest Hills during the last week of August.

Alrose Announces Personnel Changes

The Alrose Chemical Co. has announced the following changes in its staff: Dr. Arthur Dolnick has been appointed research director, Robert Feigin, formerly of Socony Vacuum Greenpoint Laboratories, is now in charge of application research, Mitchell Chalek has joined the research and development staff, and Harry Kroll, formerly in charge of organic research for the company, has left to accept a Fellowship with National Cancer Research.

Toiletries Talks Scheduled for ACDS

Members attending the Fall meeting of Associated Chain Drug Stores, scheduled for September 25-28, Hotel New Yorker, New York, N.Y., will hear toiletries discussed extensively.

Talks to be presented are: September 26, "Physical Setup of the Cosmetic Department," Frank Hale, "Importance of Proper Department Personnel," Max Knight, "Toilet Articles Independent of Cosmetics," C. A. Boyd, "Fragrance Business," Pat Bristol; September 27, "Hairmetics Department," Douglas Bressler, "Allied Lines to the Cosmetics Department," Ellis Myers, "Window and Interior Displays, Promotion and Advertising," Axel Goodman, "Cosmetics Business in Drug Stores As I See It," Jean Laurent; September 28, "Future of the Cosmetics Business," G. S. Fowler, "Fragrance Products Business," Pierre Harang, "Selling Style and Color," Charles Revson, "Hair Preparations Department," Neison Harrise



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Today, Avon Allied's branches extend from coast to coast and into Canada to serve you more efficiently. Yet, its efficiency is never dissipated by over-eager attempts to serve a vast number of clients, lest the results fall short of the Company's purpose: To produce and assemble products built to the highest

standard known to the American cosmetic industry.

When you are considering improving a product or creating a new one, it is good to know these things about Avon Allied. Take advantage of the opportunity to use the superior facilities and knowledge which Avon Allied's technical staff puts at your disposal: Men with a wealth of experience and specialized skills and the most modern scientific equipment that can be bought or developed.

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A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries September

U.S.I. Ready to Discuss **Customer Requirements** Of Synthesis Chemicals

Alcohols, acids, aldehydes, and ketones from the hydrocarbon synthesis tones from the hydrocarbon synthesis process at Brownsville, Texas, will be-come available, it is now estimated, starting early in 1950. U.S.I. is ready now to discuss the individual requirements of prospective users of these important synthesis products. The chemicals to be offered include:

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Methanol Ethanol Normal-propanol Isopropanol Normal-butanol Isobutanol Normal-pentanol Isopentanol

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Acetic acid Propionic acid Butyric acid Isobutyric acid

Aldehydes

Acetaldehyde Propionaldehyde Butyraldehyde

Methyl ethyl ketone Methyl propyl ketone Methyl butyl ketone

Oil Pierces Hole in Steel In New Punching Method

A practical method for using oil to pierce A practical method for using oil to pierce holes in steel has been developed. Ordinarily, metal punches are used to pierce sheet steel, but the new method is said to replace the punch with a column of oil. Greatest advantage of the "liquid impact" method is reported to be the saving of cost in making and replacing intricately shaped metal punches.

Hard, brittle silicon sheet steel wears out

punches.

Hard, brittle silicon sheet steel wears out metal punches rapidly. The oil, on the other hand, does not wear out, but is merely recirculated and formed into a new "punch" over and over again. Another advantage claimed for the new method is that it permits use of "soft" steel dies instead of case-hardened steel dies that must be used with metal nunches. metal punches.

Gives German Process Data For Drugs, Intermediates

Translations of technical material on German manufacturing processes for drugs, drug intermediates, and fine chemicals are said to be available now. Included are research reports on new drugs and novel methods of preparation and testing.

New Permanent Antifreeze To Be Marketed by U.S.I.

U.S.I. Ethylene Glycol Permanent Antifreeze Protects against Sub-Zero Temperatures, Prevents Corrosion

This fall, for the first time, U. S. Industrial Chemicals, Inc., will market an ethylene glycol permanent antifreeze. Brought out to meet demand of antifreeze jobbers for a permanent antifreeze as a companion to the time-tested favorite,

Super Pyro, U.S.I. Permanent Antifreeze will be available only in limited quantities this first season. Hopes are high, however, for a greater supply for the next antifreeze

season.
U.S.I. is by no means a newcomer in the field of permanent antifreeze manufacture. For a number of years U.S.I. has furnished many well-known companies in the industry with ethylene glycol, which these companies have sold under private brand names. Now, U.S.I.'s own permanent antifreeze will be available to take an important place in meeting the needs of distributors and the motoring public.

Booklet Tells How and Why Of Centrifugal Pump Care

A 16-page booklet on the care of all makes of centrifugal pumps was released recently. Giving information about pump construc-tion and its effect on maintenance, the bulletin reportedly tells how to figure head, and contains tables for determining total friction loss. Causes and cures of various pump troubles are discussed, together with littleknown facts about cavitation and how to protect against it. The booklet also relates common mistakes in packing stuffing boxes.

ATTENTION

Users of Specially Denatured Alcohol

Now is the time to renew your basic permit (Treasury Department Form 1479) for 1950. If you require forms or any assistance in their preparation, please call your nearest U.S.I. office.

Boil-proof, Freeze-proof, Rust-proof

The new U.S.I. Permanent Antifreeze is substantially boil-proof; one filling lasts all winter. It affords protection against freezing far down into sub-zero temperature ranges, a carefully chosen combination of rust inhibitors guards against corrosion in the automobile's cooling system. When used in accordance with instructions, U.S.I. Permanent Antifreeze is guaranteed not to clog passages in the system; not to damage automobile finishes, or metal or rubber parts in the cooling system; and not to leak out of a cooling system that does not leak water. U.S.I. will, of course, again market Super

Pyro Antifreeze this season. Super Pyro was introduced in 1932 as the first premium antifreeze concentrate scientifically compounded to do more than merely protect against freezing. Today's long-lasting, eco-





Old Man Winter will hold no threat for motorists who use the new U.S.I. Permanent Antifreeze. One filling can give protection for the entire winter against freezing temperatures.

September

U.S.I. CHEMICAL NEWS

1949

CONTINUED

Permanent Antifreeze

nomical Super Pyro is 33 1/3 per cent more effective than most other types of antifreeze. It protects all seven metals in the automobile cooling system against rust, and is free from unpleasant fumes.

Research Assures Continuing Improvement

A special section of U.S.I.'s technical development laboratory at Baltimore devotes



Packaging gallon cans of U.S.I. Permanent Antifreeze at the New Orleans plant. Containers for the new permanent antifreeze come in gallon and quart sizes.

itself to a constant search for improved antifreezes. Tests are continually made of the effects of antifreezes on all kinds of metals, rubber, finishes, and any other substances with which they may come in contact. The research laboratory compiles accurate data on freezing points, boiling points, toxicity, fire hazard, and thermal properties of anti-freeze products. U.S.I.'s research also serves to keep the company abreast of any changes design of automobile cooling systems which might mean the altering of antifreeze properties.

*ANSOLS

*Registered Trade Mark

New Spring Has Unique Negative Force-Deflection

An unusual type of spring which resists less the more it is deformed is said to have been invented. Besides its unique negative force-deflection, the new device has four other significant properties: enormous expandability; ability to act around corners and through small openings with freedom comparable to that of non-elastic bands; high initial force in resisting first increments of deflection; and ability to store and deliver about twice as much energy as an ordinary spiral or power spring occupying the same space. Potential uses of the new spring are said to range all the way from delicate instruments to toasters.

Chlorophyll Tooth Paste To Prevent Dental Decay

Research on tooth paste containing chlorophyll indicates that it does away with all the conditions generally regarded to be the causes of dental decay. Chlorophyll has been known for its ability to speed healing of certain gum ailments, including non-specific gingivitis and trench mouth. The new tooth pasts containing water soluble derivatives of paste, containing water-soluble derivatives of chlorophyll, is said to have greater ability to lower acid content of the mouth than any other known substance. It reportedly has similar power to prevent formation of bac-terial acids associated with tooth decay.

Portrays Flavors, Aromas

A new method whereby flavors and aromas can be evaluated objectively and portrayed pictorially was described recently by a pair of researchers.

Diamonds Now Recovered

A new process for economically and profitably recovering industrial diamonds and diamond dust from carbide grinding sludge or dusts is said to have been developed.

TECHNICAL DEVELOPMENTS

Further information regarding the manufacturers of these items may be obtained by writing U.S.I.

An improved rust-inhibitive paint-primer and finish coat combined is reported to give deeper penetration, high gloss, and tougher weathering.

For determining evaporation rates of all solvents having a viscosity less than 100 cp., and determining solvent release characteristics of resin solutions, a new device is said to be available.

Knives that require no sharpening for three years can now be made, it is reported, by a new "frozen heat" process. (No. 491)

To speed up precision filling of ampoules and small bottles by as much as 10 times, a new powder filling machine is claimed to measure accurately chemical, pharmaceutical, or other powders in any quantity from .01 cc. to 7 cc. and then to dispense automatically the desired amounts into containers at strokes from 11 to 22 per minute.

(No. 492)

To inhibit mildewing of linens, a new chemical, said to require no special equipment or handling, is available. A few cents worth of the material in the final clear rinse when laundering will treat several hundred pounds of linens, it is claimed.

(No. 493)

A new, inexpensive type of tank heater employ-ing finned tubes gives good heat transfer, it is claimed, and is easy to install and maintain. It is adaptable to almost any requirements, the makers state. (No. 494)

For research in synthesis of surface active agents, pharmaceuticals, and other chemicals, a manufacturer offers inexpensive, purified vegetable sterols in tonnage quantities. (No. 495)

New long-life fluorescent lamps, said to last from 2½ to 6 years, reportedly deliver over 200 per cent more lighting value than previous lamps, and cut replacement costs by two-thirds. They remain bright and clean, with very little discoloration, up to 5,000 burning hours, the makers claim.

(No. 496)

Binding of booklets, reports, technical data, pho tographs, etc., with plastic sheet bindings can be accomplished in less than a minute, it is claimed, with new, economical, portable equip-ment requiring no special skill to operate. (No. 497)

To rotate drums for mixing and agitating, and to move them from place to place, a new portable, motorized drum-cradile truck, suitable for containers from 1-gal. round cans to 55-gal, drums is reported on the market.

(No. 498)

Triple-Mix Repellents

Collodians
Nitrocellulose Solutions
Ethylene

Mix Repellents
OTHER PRODUCTS
Urethan, U.S.P.

Printed in U.S.A.

NDUSTRIAL CHEMICALS, (U.S.I.) 60 EAST 42ND ST., NEW YORK 17, N. Y. BRANCHES IN ALL PRINCIPAL CITIES ALCOHOLS ACETIC ESTERS INTERMEDIATES RESINS (Synthetic and Natural) *Araplaz—alkyds and alited mater Amyl Alcohol Butanol (Narmal Butyl Alcohol) Fusel Oil—Refined RESINS (Symmetric dita terrical) *Argolaz -alikyd and allied materials *Aradene-pure phenolics *Arachem-madified types Ester Gums-all types Congo Gums-raw, fused & esterified Natural Resins-all standard grades Amyl Acetate Butyl Acetate Acetoacetanilide Acetoacet-ortho-anisidide Acetoacet artha chloroanii Acetoacet artha talvidide Ethyl Acetate Ethanol (Ethyl Alcohol) OXALIC ESTERS Specially Denatured—all regular and anhydrous formulas Completely Denatured—all regular Acetoacet para-chloroan Ethyl Acetoacetate Ethyl Benzoylacetate Dibutyl Oxalate Diethyl Oxalate INSECTICIDE MATERIALS Ethyl Sodium Oxalacetate and anhydrous formulas Pure—190 proof. C.P. 96%. PHTHALIC ESTERS ETHERS Diamyl Phthalate Dibutyl Phthalate Diethyl Phthalate Ethyl Ether, U.S.P. Ethyl Ether Absolute-A.C.S. Absolute *Solox-pr ANTI-FREEZES FEED PRODUCTS Super Pyro Anti-freeze U.S.I. Permonent Anti-freeze. INSECTIFUGE MATERIALS Riboflavin Concentrates *Vacatore 40: *Curbay B.G *Special Liquid Curbay OTHER ESTERS

Dr. Methionine

Chemically Pure

Diethyl Carbonate

Ethyl Chloroformate





Patent Office Proposes Trade Mark Changes

The Patent Office has proposed splitting Class 6, covering chemicals, medicinals and cosmetics, into three classes, under which cosmetics would come under Class 51. The present Class 4, including soap, would be split and soap would be covered by Class 52.

Another proposed change would permit patent attorneys to search files for marks for which application has been made but not yet granted. At present such marks are considered as being confidential.

In the event that the proposed changes become effective, the Patent Office will reclassify any marks requiring same without application or

Board of Trade Award to Hoover and Marshall

At the "Business Speaks" dinner to be held October 18 in the Grand Ballroom of the Waldorf Astoria, New York Board of Trade Awards will be presented to former President Herbert Hoover, and to former Secretary of State George C. Marshall.

Chemical Exposition Begins November 28

The 22nd Annual Exposition of Chemical Industries will be held in the Grand Central Palace, New York, N.Y., November 28 to December 3.

Dr. and Mrs. Coutinho Return From European Visit

Dr. and Mrs. Henri Coutinho recently returned to New York following a two-month vacation in France. Passage both ways was by Air France. Dr. Coutinho spent most of the time abroad in Paris



Dr. and Mrs. Henri Coutinho enjoying themselves in the cocktail lounge of the Carlton Hotel, Cannes, France.

and Cannes on the Cote d'Azur, visiting his family and friends, many of whom he had not seen since before the war.

Dr. Coutinho stated that he was much impressed by the economic and moral improvement which was so noticeable everywhere.

Hemogenizer Manufacturer Expands

The Manton Gaulin Mfg. Co., manufacturers of homogenizers, has completed a new addition to its factory, adding about 15,000 additional sq. ft. of floor space, according to D. G. Colony, president of the company.

Allen Becomes Chief Engineer for Atlas

J. Charles Allen has been made chief engineer for Atlas Powder Co., Wilmington, Del., succeeding J. W. Hanson, retired. Charles G. Hersh has become assistant chief engineer.

Van Ameringen Addresses Chicago Chapter of SCC

A. L. van Ameringen was the featured speaker at the resumption of regular dinner meetings of the Chi-



A. L. van Ameringen

cago Chapter of the Society of Cosmetic Chemists, held September 13. His subject was "Cosmetic Perfumery." The regular feature, "What's New in Cosmetics," was presented by George Kolar.

Henry Speel Transferred to Antara Products

Henry C. Speel, for over a year a development engineer with the Central Sales Department, General Aniline & Film Corp., has been transferred to Antara Products where he will engage in sales engineering.

Mr. Speel has been in the market development division of the chemical industry for the past 20 years.

Dr. Karas in Europe

Dr. Stephen A. Karas sailed August 12 aboard the *Queen Mary* for a two-month visit to Europe. While



Dr. Stephen A. Karas

there he will visit Grasse, Switzerland, Germany and England. While in England he plans to attend the Biological Congress meeting.

Monsanto Grants Leaves of Absence

Monsanto Chemical Co. has announced that John Christian and Charles Sommer, Jr., have been granted leaves of absence to attend the Advanced Management Program at Harvard University Graduate School of Business Administration.

Trichlorethylene Plant to be Constructed in East

A new plant for the manufacture of trychlorethylene is to be constructed in Ashtabula, Ohio, at a cost in excess of \$1,500,000. The plant will be operated by Hooker-Detrex, Inc., and is jointly owned by Hooker Electro-Chemical Co. and the Detrex Corp.

Pacini Announces Meeting

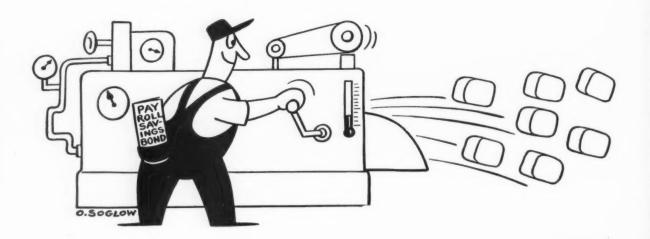
The next meeting of the Scientific Section of the Toilet Goods Association will be December 7, at the Waldorf-Astoria Hotel, according to Dr. Albert B. Pacini, chairman.

Shell Oil Opens New Wax Plant

Seventy-five million pounds a year of paraffin and micro-crystalline waxes, chemically treated to insure purity and stability of color, will be produced from a new plant recently completed by Shell Oil Co.,







Boost your employee-participation in the Payroll Savings Plan and you boost your production!

You are skeptical? Then consider this logic: The more U. S. Savings Bonds an employee holds, the more secure he feels. The more secure he feels, the greater his peace of mind—the more contented he is with his job. Results? Less absenteeism, less labor turnover, fewer accidents. End result: increased production.

And you needn't depend on theory alone. For those company benefits of the Payroll Savings Plan are borne out in the experience of more than 20,000 companies promoting the Plan.

LONG-RANGE BENEFITS, TOO

Bond sales spread the national debt,

thus increasing our national economic security. And, of course, what's good for that is also good for you and your business

The individual Bond Buyer gets back \$4, when his Bonds mature, for every \$3 he invested. That's a boon for him, and—multiplied by millions of Bond holders—represents a huge backlog of purchasing power that will help assure national prosperity through the years ahead.

IT'S EASY TO BOOST PARTICIPATION

- 1. See that a top management man sponsors the Plan.
- 2. Secure the help of the employee organizations in promoting it.
- 3. Adequately use posters and leaflets

and run stories and editorials in company publications to inform employees of the Plan's benefits to them.

4. Make a person-to-person canvass, once a year, to sign up participants.

These first four steps should win you 40-60% participation. Normal employee turnover necessitates one more step:

5. Urge each new employee, at the time he is hired, to sign up.

Nation-wide experience indicates that 50% of your employees can be persuaded to join—without high-pressure selling. All the help you need is available from your State Director, U. S. Treasury Department, Savings Bond Division. He is listed in your phone book.

The Treasury Department acknowledges with appreciation the publication of this message by

THEAMERICANPERFUMER



This is an official U. S. Treasury advertisement prepared under the auspices of the Treasury Department and the Advertising Council.

in Houston, Texas. Equipped with electronic control instruments that provide the most efficient possible operation, the new plant will make all grades of waxes.

Rance in New York Office of Albert Verley

Bert A. Rance has recently been appointed to the New York office



of Albert Verley & Co. Mr. Rance received his B.A. from the College of William and Mary in Virginia in 1947. He then went on to do graduate work at Northwestern University. For two years, he was

the tennis professional at the Chicago Town and Tennis Club and Tam O'Shanter Country Club. During this time he also wrote and acted in a series of television shows over station W.B.K.B.

Mr. Rance was also employed by the Mutual Life Insurance Co., and maintained his own insurance and real estate office. Previous to being employed by Albert Verley, he was associated with the Harry Rich Co., as a food manufacturer's representative.

BIMS Hold Final Golf Meet of the Season

The BIMS held its third and final golf tournament of the season at North Hempstead Country Club, August 25. Louis Bezard got low gross and O. Dexter Neal had low

Other prize winners were: G. W. Sands, William Huisking, W. H. Madden, John Ewald, Peter Forsman, Leonard H. Schultes, Herbert Sliger, Paul Forsman, Sewell Cork-ran, Edward A. Bush, Ray Ougheltree, Ross A. White, Dr. E. G. Mc-Donough, Harold Miner and Albert Bradley

Harry Griffiths was in charge of

prizes and did his usual fine job. The next get-to-gether of the BIMS will be the Annual Dinner to be held early in 1950,

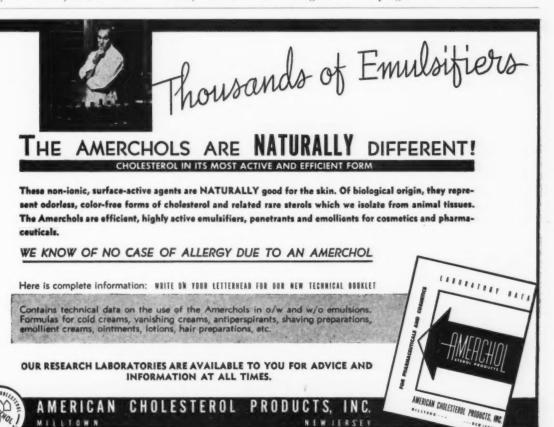
NYU Again Offers Aromatics Course

The Course on Aromatics is again being offered by New York Univer-



Samuel Klein

sity, beginning September 26. It will run for fifteen weeks, with meetings on Monday evenings. Samuel Klein will be in charge of the course. Guest lecturers will participate in the program.



AMERICAN CHOLESTEROL PRODUCTS, INC.

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Use NORTHWESTERN ETHYL BUTYRATE

when this ester is called for in your formulae.

For many years more than half of the Ethyl

Butyrate sold in this country has been manufactured by us — proof of the fine quality

of our product.

THE LARGEST MAKERS OF BUTYRIC ETHER IN THE WORLD

The NORTHWESTERN CHEMICAL CO.

INCORPORATED 1882

WAUWATOSA, WISCONSIN

PLYMOUTH WAXES for CREAMS

This Spermaceti should not be confused with interior hydrogenated sperm oils which are sometimes offered as Spermaceti The Plymouth Brand is the finest which can be produced and is produced from Genuine Sperm Oil by the cold pressing method. It is a very white crystalline wax containing no free oil, has a very low Iodine number and is free of any offensive odors.

PLYMOUTH Ozokerites

We offer two grades One is the highest quality obtainable, 76°-78° C melting point and the other grade lower in price and of lower melting point 66°-68° C. Both are guaranteed 100% Pure Bleached Ozokerites.

PLYMOUTH Sun-bleached White Beeswax U.S.P.

This is guaranteed to be a 100% Pure Beeswax and sun-bleached It is refined by the centrifugal method which removes all and every trace of foreign matter: We will gladly send samples.

PLYMOUTH White Cirine Wax

A special grade of White Ceresin Wax prepared for the cosmetic trade Absolutely white and odorless. It has a melting point corresponding to that of Beeswax so that in using it in connection with Beeswax in cream any "lumpiness" is avoided. Its use will also produce a very glossy cream.

We offer all grades of the U.S.P. fully-refined Paraffin Waxes.

A COMPLETE LINE OF COSMETIC RAW MATERIALS

M. W. PARSONS

2mports
and PLYMOUTH ORGANIC LABORATORIES, Inc.

Dr. Cullen to Address DCAT Meeting

Dr. Frederick J. Cullen, executive vice-president of the Proprietary Association of America, will address the Drug, Chemical and Allied Trades Section of the New York Board of Trade at its 59th Annual Meeting to be held at Shawnee Inn, Shawnee-on-Delaware, Pa., September 22-24. His subject will be "Trends in Government."

CDACA Dinner Meeting

The next regular dinner and business meeting of the Cincinati Drug and Chemical Association, Inc., is to be held September 30, at the Hotel Alms. The guest speaker will be Justin Meyer. Mr. Meyer's subject will be "Peace of Mind."

Malmstrom Moves Chicago Office

N. I. Malmstrom & Co. has announced the removal of its Chicago office from 444 West Grand Ace., to 612 North Michigan Ave., Chicago 11, Ill. Complete stocks are carried

in the Chicago warehouse to service the Mid-West with immediate delivery.

Purely Personal

Mailing is completed on a new booklet outlining the services and activities of the DCAT.

PERSUIT is a new Fall color by Jacqueline Cochran.

WOODBURY is introducing a new liquifying cleansing cream.

Bourjois is introducing a new perfume BEAU BELLE. Distinctively packaged, it is to be backed by a heavy advertising campaign.

Lentheric is introducing a new French perfume, REPARTEE.

For the six months ended June 30, 1949, tentative net earnings of BRISTOL-MYERS CO. were \$1,606,495.

BERNIE GOULD is temporarily filling the newly established position of director of sales for the Toni Co. Representatives for Imogene Shepherd, Ltd., are MINOR H. ANDREWS CO., 30 East Adams St., Chicago, Ill.; ELLEN LOCK-WOOD, 2 Sheridan Square, New York, N.Y.; and MARY ATKIN-SON, 607 S. Hill, Los Angeles, Calif.

MRS. ROSE MARIE de HOYOS DORMER, the charming daughter of Mayor and Mrs. Luis de Hoyos of Monticello, N.Y. is shown in an attractive photograph on the cover of the magazine Pic-Week, a picture cavalcade of Sullivan County, New York for August 6. Her father Hon. Luis de Hoyos is chairman of the Mark Hellinger fund drive in Sullivan County under the auspices of the New York Heart Association. Notable stars in the theatrical world participated in Summer shows in Monticello to aid the fund.

In the August issue of The American Perfumer, an item appeared to the effect that Adam T. Krol had joined Sominion Products, Inc., as chief chemist and manager of the aromatic chemical division. Of course, the firm referred to was DOMINION PRODUCTS, INC., Long Island City, L.I.

OIL ORRIS ROOT LIQUID ABSOLUTE ORRIS CONCRETE ORRIS OLEORESIN (Resinoid)

Experience demonstrates that none of the substitutes for Orris are wholly satisfactory in giving the characteristic Orris note. It is therefore fortunate that these well known Bush specialties are now readily available.

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COSMETIC

- * Liquid Castile Soap Shampoo
- * Liquid Coconut Oil Soap Shampoo
- ★ Liquid Olive Oil Soap Shampoo (50% Olive Oil Base)

PHARMACEUTICAL

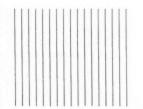
- U.S.P. Green Soap
- U.S.P. Powdered Castile Soap
- Castile Bar, U.S.P. (40-lb. cartons)
- Powdered Coconut Oil Soap

★ Ideal for bottling. Never any sediment or precipitation. Our patented process assures brilliant clarity at all times.

Patent No. 2,402,557

KRANICH SOAPCO., Inc.

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LEATHER

Its Importance in Perfume Formulae

It has been correctly stated that the value of the odor of Leather was not fully appreciated until SYNAROME created their synthetic CUIRS which are animal in origin and not from the usual birch tar with its attendant bitter odor of Creosote.

SYNAROME'S CUIR 445
SYNAROME'S CUIR H.F.
SYNAROME'S CUIR de RUSSIE

. . . when used appropriately as a modifier, any of the above enriches the perfume and makes it outstanding.

As an actual demonstration, permit us to send you a package containing three samples: No. 1 Base No. 341, a well-balanced compound costing \$9.00 per pound; No. 2, the same compound containing 10% SYNAROME'S CUIR de RUSSIE; and No. 3, a sample of CUIR de RUSSIE SYNAROME.

With these samples before you, you will have some idea of the use of *these Leather odors* in perfumery.



SOLE AGENTS

MARKET REPORT

Lanolin Supply Tight

A DVANCES in several of the seed and spice oils, citronella, patchouli and lemongrass were offset by reductions in mint oils, dill and other domestic items because of new crop influences. The extended period of hot weather served to prolong the demand for citrus oils, fruit flavors, citric acid and specialties, that go into the manufacture of extracts for the beverage industry. Toward the close of last month a rather noticeable upturn developed in those articles that go into the pickling trade. Reports concerning Fall business were highly mixed. Some concern was expressed with respect to future buying by makers of toiletries in the face of the high excise taxes still in force, despite the alleged fact that they had been imposed at a time to curb consumer buying because of inventory shortages.

Essential oil dealers and aromatic chemical manufacturers should be receiving a fairly steady flow of raw material orders by this time for the account of perfumers, cosmeticians and other consumer outlets that normally anticipate their future requirements for merchandise to be manufactured into finished products for the holiday trade. A slight gain has been noted in a few quarters but the improvement has been slow at best and conservative in character.

PRICES ARE LOW

Many buyers are still price conscious, but with prices on a number of articles having settled well below prewar levels some houses are advising customers to at least cover a portion of their anticipated Fall requirements.

Economic conditions both here and abroad make it extremely difficult to make predictions with any degree of accuracy and a continued policy of restricted purchases in anticipation of further savings in costs could readily result in rather unexpected surprises.

As an example the Consortium in Italy boosted its prices on oil bergamot 50¢ per pound and higher cables were also received on Italian lemon oil. The advance in shipping prices on bergamot had only a slight influence upon spot prices because of a competitive situation in the local market, while in lemon some local houses were inclined to discount the firmer reports from the primary center because of a reasonably good supply of low cost oil available on spot.

Mint oil prices moved in favor of buyers with the approaching period when first cuttings of the new crop would be made for distillation. The country enjoyed favorable weather conditions since the May frosts and there was nothing in the overall picture that suggested

anything but near normal conditions during the distillation period.

Lime oil started to feel the effects of coming crops in Mexico and the West Indies. Some houses reduced quotations 50¢ per pound, and with the passing of the most active consuming season further price recessions are likely to be noted. New crop dillweed oil for nearby delivery was offered at fully \$1 per pound below the prices quoted by major dealers for spot goods.

In the spice oil group, oil black pepper registered a sharp advance in keeping with the spectacular developments in the crude material. Real strength prevailed in clove oil. Prices on foreign clove oil were strong and quotations on material produced in this country had an upward tendency reflecting the high cost of the spice.

The supply position in lanolin was tight. Major suppliers were reluctant to accept new business because of the ready outlet for virtually all available supplies. Both the pharmaceutical and cosmetic grades are difficult to obtain for immediate delivery. Less material has been arriving from abroad of late and the outlook regarding domestic production continues highly clouded being dependent upon scouring operations in the wool industry. A number of woolen mills have reasonably good quantities of scoured material on hand and only a marked and prolonged period of activity in that industry could be expected to bring the supply of lanolin more in balance with demand.

GLYCERIN FROM RUSSIA

A development of considerable interest in the glycerin market was the purchase of two 500 ton lots of saponification from Russia for August-October shipment. The purchase was reported to have been made through London. Prior to the war the United States imported crude glycerin from Russia and the material, said to be obtained through soap production, was found to be of suitable quality. Some fairly substantial quantities of glycerin are being held in South America. Until this material may be obtained at more reasonable prices no sizeable amounts can be expected to come through from that country.

The outlook in menthol is highly clouded because of the chaotic conditions in China. According to reports, however, fairly good quantities are obtainable in China but it is a matter of obtaining steamer space in view of the blockade on shipments out of that country. New crop Brazilian material is likely to be offered in the next few weeks for January-March shipment.

GERARD J. DANCO, INC.

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ORIGINATORS PERFUME TONES

Laboratories in New York and Grasse, France

- FINE ESSENTIAL AND FLORAL OILS
- AROMATIC CHEMICALS
- MUSK CIVET AMBERGRIS

Exclusive Agents in the United States, Canada

CAMILLI, ALBERT & LALOUE, S. A. **GRASSE, FRANCE**

VICTOR HASSLAUER S. A. PARIS, FRANCE

"Danco Quality Guaranteed by Reputation"

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TO REMOVE ALL UNDESIRABLE IMPURITIES

Dependable, trouble-free Alsop "Sealed-Disc" Portable Filters will save you time, labor and money whether you filter in volume or variety. Thousands of users are sold on their convenience and speed of operation—their positive filtration results. There's an Alsop Filter for every liquid product.

Send for this Catalog

This New "Scaled-Dise" principle of fil-tration has been tested and proven by hundreds of concerns and on thousands of different liquid products. Check their job-tested features—write for your copy of the New Alsop Liquid Processing Equipment Catalogue. Alsop Eng. Corp., 409 Rose St., Milldale, Conn.

ALSOP ENGINEERING CORP. Filters, Filter Discs, Mixers, Agitators, Pumps and Tanks





For finer products.

Aromatic Chemicals Essential Oils Specialties Perfume Compounds

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RENE FORSTER CO. INC.

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PRICES IN THE NEW YORK MARKET

(Quotations on these pages are those made by local dealers, but are subject to revision without notice)

ESSENTIAL OILS

All prices per lb. unless otherwise specified

Almond Bit, FPA per lb	4.00@	4.75
Sweet True	.80@	1.00
Apricot Kernel	.50@	.58
Amber, rectified	Nomi	inal
Angelica Root	150.00@	190.00
Anise, U. S. P	.80@	.95
Aspic (spike) Span	1.05@	1.65
Avocado	1.10@	1.50
Bay	1.25@	2.00
Bergamot	4.35@	4.80
Artificial	2.10@	3.00
Birch, sweet	2.50@	7.50
Birchtar, crude	1.00@	1.50
Birchtar, rectified	4.10@	4.75
Bois de Rose	2.75@	3.05
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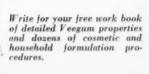
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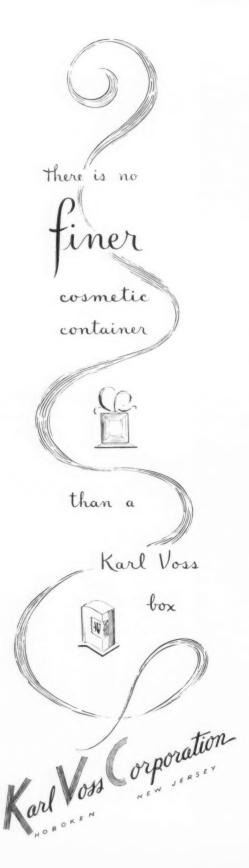


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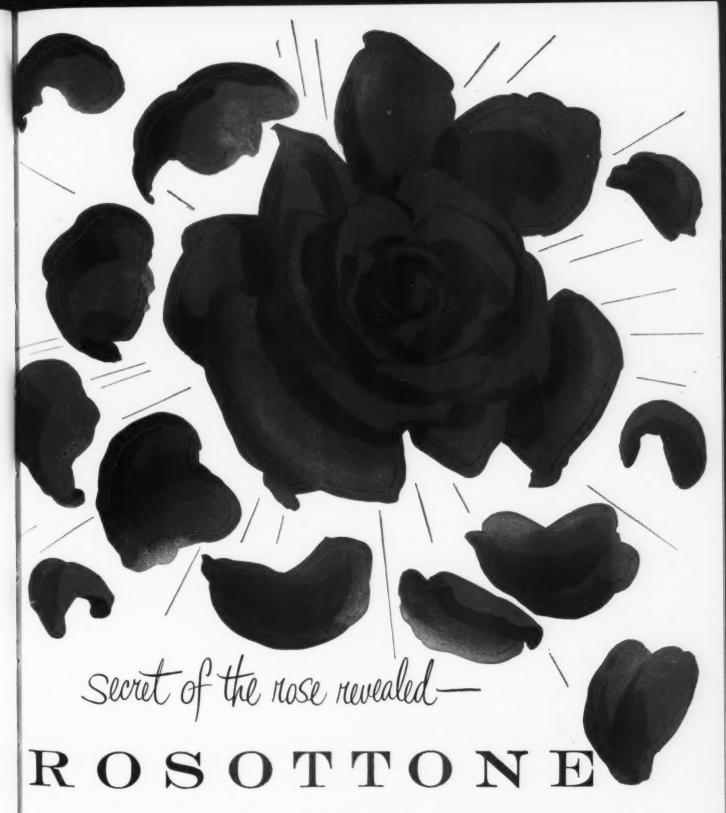
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